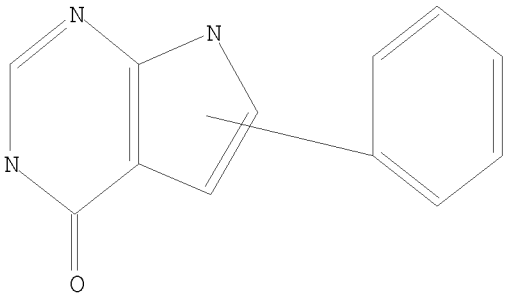
```
1-2  1-6  2-3  3-4  4-5  5-6  5-7  6-9  7-8  8-9  11-12  11-16  12-13  13-14  14-15
 15-16
exact/norm bonds :
1-2  1-6  1-10  2-3  3-4  4-5  5-6  5-7  7-8
exact bonds :
6-9  8-9
normalized bonds :
11-12  11-16  12-13  13-14  14-15  15-16
isolated ring systems :
containing 1 : 11 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:CLASS
11:Atom  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  18:Atom



L1      STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1              STR
```




```
Structure attributes must be viewed using STN Express query preparation.


=> s l1
SAMPLE SEARCH INITIATED 09:40:36 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      918 TO ITERATE

100.0% PROCESSED      918 ITERATIONS                                12 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        16543 TO    20177
PROJECTED ANSWERS:              33 TO      447

L2           12 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 09:40:42 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    17836 TO ITERATE
```

100.0% PROCESSED 17836 ITERATIONS 359 ANSWERS
SEARCH TIME: 00.00.01

L3 359 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	191.54	191.76

FILE 'CAPLUS' ENTERED AT 09:40:47 ON 13 APR 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 13 Apr 2010 VOL 152 ISS 16
FILE LAST UPDATED: 12 Apr 2010 (20100412/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2010

CAplus now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2010.

CAS Information Use Policies apply and are available at:

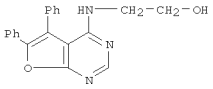
http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3
L4 69 L3

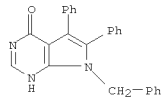
=> d ibib abs hitstr tot

L4 ANSWER 1 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2010:139427 CAPLUS
DOCUMENT NUMBER: 152:278628
TITLE: Identification, SAR Studies, and X-ray Co-crystallographic Analysis of a Novel Furanopyrimidine Aurora Kinase A Inhibitor
AUTHOR(S): Coumar, Mohane Selvaraj; Tsai, Ming-Tsung; Chu, Chang-Ying; Uang, Biing-Jiun; Lin, Wen-Hsing; Chang, Chun-Yu; Chang, Teng-Yuan; Leou, Jiun-Shyang; Teng, Chi-Huang; Wu, Jian-Sung; Fang, Ming-Yu; Chen, Chun-Hwa; Hsu, John T.-A.; Wu, Su-Ying; Chao, Yu-Sheng; Hsieh, Hsing-Pang
CORPORATE SOURCE: Division of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Taichung, 350, Taiwan
SOURCE: ChemMedChem (2010), 5(2), 255-267
CODEN: CHEMGX; ISSN: 1860-7179
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



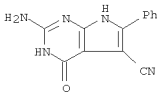
I

AB Herein we reveal a simple method for the identification of novel Aurora kinase A inhibitors through substructure searching of an inhouse compound library to select compds. for testing. A hydrazone fragment conferring Aurora kinase activity and heterocyclic rings most frequently reported in kinase inhibitors were used as substructure queries to filter the inhouse compound library collection prior to testing. Five new series of Aurora kinase inhibitors were identified through this strategy, with IC50 values ranging from .apprx.300 nM to .apprx.15 μM, by testing only 133 compds. from a database of .apprx.125 000 compds. Structure-activity relationship studies and X-ray co-crystallog. anal. of the most potent compound, 8 (I), a furanopyrimidine derivative with an IC50 value of 309 nM toward Aurora kinase A, were carried out. The knowledge gained through these studies could help in the future design of potent Aurora kinase inhibitors.
IT 173458-79-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(furanopyrimidines as Aurora kinase A inhibitors)
RN 173458-79-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl-7-(phenylmethyl)- (CA INDEX NAME)

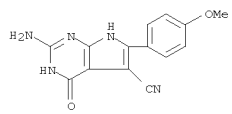


REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

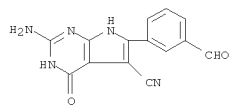
L4 ANSWER 2 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:1418713 CAPLUS
DOCUMENT NUMBER: 152:51204
TITLE: Structure-Based Design of Pteridine Reductase Inhibitors Targeting African Sleeping Sickness and the Leishmaniasis
AUTHOR(S): Tulloch, Lindsay B.; Martini, Viviane P.; Iulek, Jorge; Huggan, Judith K.; Lee, Jeong Hwan; Gibson, Colin L.; Smith, Terry K.; Suckling, Colin J.; Hunter, William N.
CORPORATE SOURCE: Division of Biological Chemistry and Drug Discovery, College of Life Sciences, University of Dundee, Dundee, DD1 5EH, UK
SOURCE: Journal of Medicinal Chemistry (2010), 53(1), 221-229
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Pteridine reductase (PTR1) is a target for drug development against Trypanosoma and Leishmania species, parasites that cause serious tropical diseases and for which therapies are inadequate. The authors adopted a structure-based approach to the design of novel PTR1 inhibitors based on three mol. scaffolds. A series of compds., most newly synthesized, were identified as inhibitors with PTR1-species specific properties explained by structural differences between the T. brucei and L. major enzymes. The most potent inhibitors target T. brucei PTR1, and two compds. displayed antiparasite activity against the bloodstream form of the parasite. PTR1 contributes to antifolate drug resistance by providing a mol. bypass of dihydrofolate reductase (DHFR) inhibition. Therefore, combining PTR1 and DHFR inhibitors might improve therapeutic efficacy. The authors tested two new compds. with known DHFR inhibitors. A synergistic effect was observed for one particular combination highlighting the potential of such an approach for treatment of African sleeping sickness.
IT 1160570-09-1 1160570-10-4
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(structure-based design of pteridine reductase inhibitors targeting African sleeping sickness and the leishmaniasis and combination with dihydrofolate reductase inhibitors)
RN 1160570-09-1 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-4,7-dihydro-4-oxo-6-phenyl- (CA INDEX NAME)



RN 1160570-10-4 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-4,7-dihydro-6-(4-methoxyphenyl)-4-oxo- (CA INDEX NAME)



IT 1160570-13-7
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(structure-based design of pteridine reductase inhibitors targeting African sleeping sickness and the leishmaniasis and combination with dihydrofolate reductase inhibitors)
RN 1160570-13-7 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-6-(3-formylphenyl)-4,7-dihydro-4-oxo- (CA INDEX NAME)



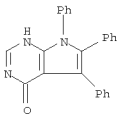
REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:865255 CAPLUS
DOCUMENT NUMBER: 151:337143
TITLE: Synthesis of certain pyrrole derivatives as antimicrobial agents
AUTHOR(S): Mohamed, Mosaad Sayed; El-Domany, Ramdan Ahmed; Abd El-Hameed, Rania Helmy
CORPORATE SOURCE: Organic Chemistry Department, Faculty of Pharmacy, Helwan University, Cairo, Egypt
SOURCE: Acta Pharmaceutica (Zagreb, Croatia) (2009), 59(2), 145-158
CODEN: ACPHEE; ISSN: 1330-0075
PUBLISHER: Croatian Pharmaceutical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 151:337143

AB In an effort to establish new pyrroles and pyrrolo[2,3-d]pyrimidines with improved antimicrobial activity we report here the synthesis and in vitro microbiol. evaluation of a series of pyrrole derivs. A series of new 2-aminopyrrole-3-carbonitriles were synthesized from the reaction of benzoin, primary aromatic amines and malononitrile, from which a number of pyrrole derivs. and pyrrolo[2,3-d]pyrimidines were synthesized. The in vitro antimicrobial testing of the synthesized compds. was carried out against Gram-pos., Gram-neg. bacteria and fungi. Some of the prepared compds., [2-amino-1-(2-methylphenyl)-4,5-diphenyl-1H-pyrrole-3-carbonitriles, 2-amino-3-carbamoyl-1-(3-methylphenyl)-4,5-diphenyl-1H-pyrroles, N-(3-cyano-1-(2-methylphenyl)-4,5-diphenyl-1H-pyrrol-2-yl)-acetamides, N-(3-cyano-1-(3-methylphenyl)-4,5-diphenyl-1H-pyrrol-2-yl)-acetamides, 2-amino-1-(4-methoxyphenyl)-4,5-diphenyl-3-tetrazolo-1H-pyrroles, 7-(4-methoxyphenyl)-5,6-diphenyl-7H-pyrrolo[2,3-d]pyrimidin-4(3H)-ones, 7-(3-methylphenyl)-5,6-diphenyl-7H-pyrrolo[2,3-d]pyrimidin-4(3H)-thione and N-(7-(2-methylphenyl)-5,6-diphenyl-7H-pyrrolo[2,3-d]pyrimidine)-N-aryl amines] showed potent antimicrobial activity.

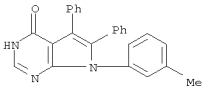
IT 175348-05-7P 1186242-57-8P 1186242-58-9P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and antimicrobial activity of pyrrole derivs. and pyrrolo[2,3-d]pyrimidines)

RN 175348-05-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6,7-triphenyl- (CA INDEX NAME)

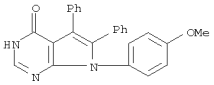


L4 ANSWER 3 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 1186242-57-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(3-methylphenyl)-5,6-diphenyl- (CA INDEX NAME)

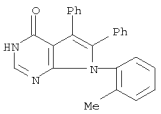


RN 1186242-58-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-methoxyphenyl)-5,6-diphenyl- (CA INDEX NAME)



IT 1186242-56-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and antimicrobial activity of pyrrole derivs. and pyrrolo[2,3-d]pyrimidines)

RN 1186242-56-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(2-methylphenyl)-5,6-diphenyl- (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:846114 CAPLUS
DOCUMENT NUMBER: 151:92851
TITLE: Method using lifespan-altering compounds for altering the lifespan of eukaryotic organisms, and screening for such compounds
INVENTOR(S): Goldfarb, David Scott
PATENT ASSIGNEE(S): University of Rochester, USA
SOURCE: U.S. Pat. Appl. Publ., 57pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

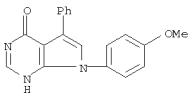
PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20090163545	A1	20090625	US 2008-341615		20081222
US 20090163545	A1	20090625	US 2008-341615		20081222
PRIORITY APPLN. INFO.:			US 2008-23801P	P	20080125
			US 2007-16362P	P	20071221
			US 2008-341615		20081222

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention discloses a method for altering the lifespan of a eukaryotic organism. The method comprises the steps of providing a lifespan-altering compound, and administering an effective amount of the compound to a eukaryotic organism, such that the lifespan of the organism is altered. In one embodiment, the compound is identified using the DeaD assay. [This abstract record is one of 20 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

IT 220835-17-6
RL: PAC (Pharmacological activity); BIOL (Biological study)
(method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)

RN 220835-17-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-methoxyphenyl)-5-phenyl- (CA INDEX NAME)



L4 ANSWER 4 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L4 ANSWER 5 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:846108 CAPLUS
DOCUMENT NUMBER: 151:92845
TITLE: Method using lifespan-altering compounds for altering the lifespan of eukaryotic organisms, and screening for such compounds
INVENTOR(S): Goldfarb, David Scott
PATENT ASSIGNEE(S): University of Rochester, USA
SOURCE: U.S. Pat. Appl. Publ., 57pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20090163545	A1	20090625	US 2008-341615		20081222
US 20090163545	A1	20090625	US 2008-341615		20081222
PRIORITY APPLN. INFO.:			US 2008-23801P	P	20080125
			US 2007-16362P	P	20071221
			US 2008-341615		20081222

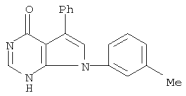
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention discloses a method for altering the lifespan of a eukaryotic organism. The method comprises the steps of providing a lifespan-altering compound, and administering an effective amount of the compound to a eukaryotic organism, such that the lifespan of the organism is altered. In one embodiment, the compound is identified using the DeaD assay. [This abstract record is one of 20 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

IT 865546-58-3
RL: PAC (Pharmacological activity); BIOL (Biological study)
(method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)

RN 865546-58-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(3-methylphenyl)-5-phenyl-
(CA INDEX NAME)

L4 ANSWER 5 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L4 ANSWER 6 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:846105 CAPLUS
DOCUMENT NUMBER: 151:92842
TITLE: Method using lifespan-altering compounds for altering the lifespan of eukaryotic organisms, and screening for such compounds
INVENTOR(S): Goldfarb, David Scott
PATENT ASSIGNEE(S): University of Rochester, USA
SOURCE: U.S. Pat. Appl. Publ., 57pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

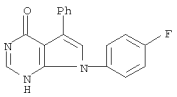
PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20090163545	A1	20090625	US 2008-341615		20081222
US 20090163545	A1	20090625	US 2008-341615		20081222
PRIORITY APPLN. INFO.:			US 2008-23801P	P	20080125
			US 2007-16362P	P	20071221
			US 2008-341615		20081222

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention discloses a method for altering the lifespan of a eukaryotic organism. The method comprises the steps of providing a lifespan-altering compound, and administering an effective amount of the compound to a eukaryotic organism, such that the lifespan of the organism is altered. In one embodiment, the compound is identified using the DeaD assay. [This abstract record is one of 20 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

IT 243665-93-2
RL: PAC (Pharmacological activity); BIOL (Biological study)
(method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)

RN 243665-93-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-5-phenyl-
(CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

L4 ANSWER 6 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(1 CITINGS)

L4 ANSWER 7 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:846102 CAPLUS
DOCUMENT NUMBER: 151:92839
TITLE: Method using lifespan-altering compounds for altering the lifespan of eukaryotic organisms, and screening for such compounds
INVENTOR(S): Goldfarb, David Scott
PATENT ASSIGNEE(S): University of Rochester, USA
SOURCE: U.S. Pat. Appl. Publ., 57pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20090163545	A1	20090625	US 2008-341615		20081222
US 20090163545	A1	20090625	US 2008-341615		20081222
PRIORITY APPLN. INFO.:			US 2008-23801P	P	20080125
			US 2007-16362P	P	20071221
			US 2008-341615		20081222

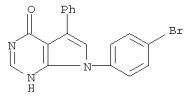
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention discloses a method for altering the lifespan of a eukaryotic organism. The method comprises the steps of providing a lifespan-altering compound, and administering an effective amount of the compound to a eukaryotic organism, such that the lifespan of the organism is altered. In one embodiment, the compound is identified using the DeaD assay. [This abstract record is one of 20 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

IT 220835-18-7
RL: PAC (Pharmacological activity); BIOL (Biological study)
(method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)

RN 220835-18-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-bromophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

L4 ANSWER 7 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L4 ANSWER 8 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:846100 CAPLUS
DOCUMENT NUMBER: 151:92837
TITLE: Method using lifespan-altering compounds for altering the lifespan of eukaryotic organisms, and screening for such compounds
INVENTOR(S): Goldfarb, David Scott
PATENT ASSIGNEE(S): University of Rochester, USA
SOURCE: U.S. Pat. Appl. Publ., 57pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20090163545	A1	20090625	US 2008-341615		20081222
US 20090163545	A1	20090625	US 2008-341615		20081222
PRIORITY APPLN. INFO.:			US 2008-23801P	P	20080125
			US 2007-16362P	P	20071221
			US 2008-341615		20081222

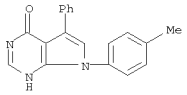
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention discloses a method for altering the lifespan of a eukaryotic organism. The method comprises the steps of providing a lifespan-altering compound, and administering an effective amount of the compound to a eukaryotic organism, such that the lifespan of the organism is altered. In one embodiment, the compound is identified using the DeaD assay. [This abstract record is one of 20 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

IT 865546-60-7
RL: PAC (Pharmacological activity); BIOL (Biological study)
(method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)

RN 865546-60-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-methylphenyl)-5-phenyl- (CA INDEX NAME)

L4 ANSWER 8 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L4 ANSWER 9 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:793755 CAPLUS
DOCUMENT NUMBER: 151:124018
TITLE: Preparation of pyrrolo[2,3-d]pyrimidine derivatives as
CGRP receptor antagonists
INVENTOR(S): Nichols, Paula Louise; Sehmi, Sanjeet Singh; Ward, Robert William; Wilson, David Matthew
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 136pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009080682	A1	20090702	WO 2008-EP67823	20081218

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

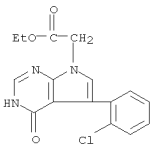
PRIORITY APPLN. INFO.: GB 2007-25103 A 20071221

OTHER SOURCE(S): MARPAT 151:124018
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I and II [R1 = H, acetyl, amino, etc.; R2 = (un)substituted aryl; n = 0-2; R3 and R4 together form (un)substituted fused 6-membered aromatic ring containing 0-2 N atoms] that are CGRP receptor antagonists which are useful in the treatment of migraine, headache, and cluster headache, were prepared E.g., a multi-step synthesis of III, starting from 7H-pyrrolo[2,3-d]pyrimidine, was given. Exemplified compds.
I were tested in CRLR-RAMP1 cAMP TR-FRET assay and exhibited fpKi values greater than or equal to 6.5. Pharmaceutical composition comprising the compound
I or II is disclosed.
IT 1168106-63-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

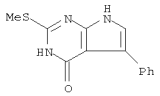
L4 ANSWER 9 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(Reactant or reagent)
(prepn. of pyrrolo[2,3-d]pyrimidine derivs. as CGRP receptor antagonists for treating migraine, headache and cluster headache)
RN 1168106-63-5 CAPLUS
CN 7H-Pyrrolo[2,3-d]pyrimidine-7-acetic acid, 5-(2-chlorophenyl)-3,4-dihydro-4-oxo-, ethyl ester (CA INDEX NAME)



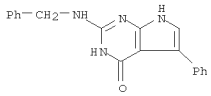
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:449132 CAPLUS
DOCUMENT NUMBER: 151:56797
TITLE: Diversity oriented syntheses of fused pyrimidines designed as potential antifolates
AUTHOR(S): Gibson, Colin L.; Huggan, Judith K.; Kennedy, Alan; Kiefer, Lionel; Lee, Jeong Hwan; Suckling, Colin J.; Clements, Carol; Harvey, Alan L.; Hunter, William N.; Tulloch, Lindsay B.
CORPORATE SOURCE: WestCHEM, Department of Pure & Applied Chemistry, University of Strathclyde, Glasgow, G1 1XL, UK
SOURCE: Organic & Biomolecular Chemistry (2009), 7(9), 1829-1842
CODEN: OBCRAK; ISSN: 1477-0520
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 151:56797
AB Diversity oriented syntheses of some furo[2,3-d]pyrimidines and pyrrolo[2,3-d]pyrimidines related to folate, guanine, and diaminopyrimidine-containing drugs have been developed for the preparation of
potential anti-infective and anticancer compds. Amide couplings and Suzuki couplings on the basic heterocyclic templates were used, in the latter case yields being especially high using aromatic trifluoroborates as the
coupling partner. A new ring synthesis of 6-aryl-substituted deazaguanines bearing 2-alkylthio groups has been developed using Michael addition of substituted nitro styrenes. Diversity at C-2 has been introduced
by oxidation and substitution with a range of amino nucleophiles. The chemical
reactivity of these pyrrolopyrimidines with respect to both electrophilic substitution in ring synthesis and nucleophilic substitution for diversity
is discussed. Several compds. were found to inhibit pteridine reductases from the protozoan parasites Trypanosoma brucei and Leishmania major at the micromolar level and to inhibit the growth of Trypanosoma brucei brucei
in cell culture at higher concns. From these results, significant structural features required for inhibition of this important drug target enzyme have been identified.
IT 1160569-82-3P
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of furo[2,3-d]pyrimidines and pyrrolo[2,3-d]pyrimidines as
inhibitors of pteridine reductases from protozoan parasites)
RN 1160569-82-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-(methylthio)-5-phenyl- (CA INDEX NAME)

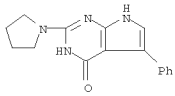
L4 ANSWER 10 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



IT 1160569-86-7P 1160569-87-8P 1160569-88-9P
1160570-09-1P 1160570-10-4P 1160570-11-5P
1160570-19-3P 1160570-20-6P 1160570-21-7P
1160570-22-8P
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of furo[2,3-d]pyrimidines and pyrrolo[2,3-d]pyrimidines as
inhibitors of pteridine reductases from protozoan parasites)
RN 1160569-86-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-phenyl-2-[(phenylmethyl)amino]- (CA INDEX NAME)

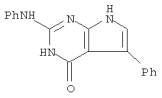


RN 1160569-87-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-phenyl-2-(1-pyrrolidinyl)-
(CA INDEX NAME)

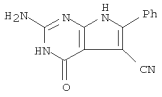


RN 1160569-88-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-phenyl-2-(phenylamino)- (CA INDEX NAME)

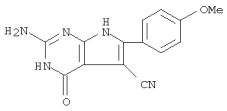
L4 ANSWER 10 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



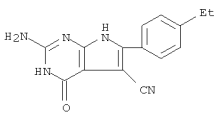
RN 1160570-09-1 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-4,7-dihydro-4-oxo-6-phenyl- (CA INDEX NAME)



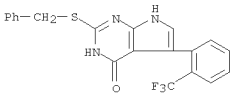
RN 1160570-10-4 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-4,7-dihydro-6-(4-methoxyphenyl)-4-oxo- (CA INDEX NAME)



RN 1160570-11-5 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-6-(4-ethylphenyl)-4,7-dihydro-4-oxo- (CA INDEX NAME)

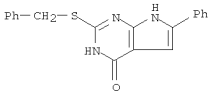


L4 ANSWER 10 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

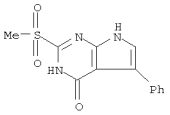


IT 1160569-74-3P 1160570-23-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of furo[2,3-d]pyrimidines and pyrrolo[2,3-d]pyrimidines as
inhibitors of pteridine reductases from protozoan parasites)

RN 1160569-74-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl-2-[(phenylmethyl)thio]- (CA INDEX NAME)



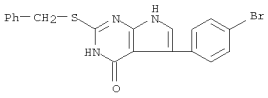
RN 1160570-23-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-(methylsulfonyl)-5-phenyl-
(CA INDEX NAME)



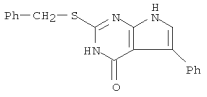
IT 1160570-13-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of furo[2,3-d]pyrimidines and pyrrolo[2,3-d]pyrimidines as
inhibitors of pteridine reductases from protozoan parasites)

RN 1160570-13-7 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-5-carbonitrile, 2-amino-6-(3-formylphenyl)-4,7-dihydro-4-oxo- (CA INDEX NAME)

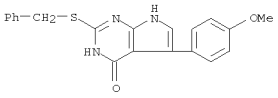
L4 ANSWER 10 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 1160570-19-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-bromophenyl)-3,7-dihydro-2-[(phenylmethyl)thio]- (CA INDEX NAME)



RN 1160570-20-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-phenyl-2-[(phenylmethyl)thio]- (CA INDEX NAME)

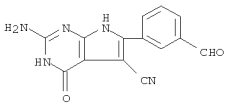


RN 1160570-21-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-(4-methoxyphenyl)-2-[(phenylmethyl)thio]- (CA INDEX NAME)



RN 1160570-22-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-[(phenylmethyl)thio]-5-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)

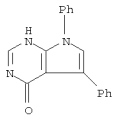
L4 ANSWER 10 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

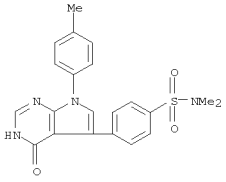
L4 ANSWER 11 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:247555 CAPLUS
DOCUMENT NUMBER: 150:413108
TITLE: Docking, 3D-QSAR studies and in silico ADME prediction
on c-Src tyrosine kinase inhibitors
AUTHOR(S): Tintori, Cristina; Magnani, Matteo; Schenone, Silvia; Botta, Maurizio
CORPORATE SOURCE: Dipartimento Farmaco Chimico Tecnologico, Universita degli Studi di Siena, Siena, 2, I-53100, Italy
SOURCE: European Journal of Medicinal Chemistry (2009), 44(3),
990-1000
CODEN: EJMCA5; ISSN: 0223-5234
PUBLISHER: Elsevier Masson SAS
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Docking simulations and three-dimensional quant. structure-activity relationship (3D-QSAR) anal. were performed on a wide set of c-Src inhibitors. The study was conducted using a structure-based alignment and
by applying the GRID/GOLPE approach. The present 3D-QSAR investigation proved to be of good statistical value, displaying r 2, q 2 and cross-validation SDEP values of 0.94, 0.84 and 0.42, resp. Moreover, such
a model also proved to be capable of predicting the activities of an external test set of compds. The availability of the 3D structure of the target made possible the interpretation of steric and electrostatic maps within the binding site environment and provided useful insight into the structural requirements for inhibitory activity against c-Src. Two regions whose occupation by hydrophobic portions of ligands would favorably affect the activity were clearly identified. Moreover, hydrogen
bond interactions involving residues Met343, Asp406 and Ser347 emerged as playing a key role in determining the affinity of the active inhibitors toward
c-Src. Furthermore, the inhibitors bearing a basic nitrogen provided enhanced potency through protonation and salt bridge formation with Asp350. A preliminary pharmacokinetic profile of the mols. under anal. was also drawn on the basis of Volsurf predictions.
IT 287177-12-2
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(docking, 3D-QSAR studies and in silico ADME prediction on c-Src tyrosine kinase inhibitors)
RN 287177-12-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,7-diphenyl- (CA INDEX NAME)

L4 ANSWER 11 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:142088 CAPLUS
DOCUMENT NUMBER: 151:267012
TITLE: Heteroaromatization with sulfonamidophenylethanone, Part I: Synthesis of novel pyrrolo[2,3-d]pyrimidine and pyrrolo[3,2-e][1,2,4]triazolo[1,5-c]pyrimidine derivatives containing dimethylsulfonamide moiety
AUTHOR(S): Hassan, Saber M.; El-Maghraby, Ahmed A.; Abdel Aal, Mahmoud M.; Bashandy, Mahmoud S.
CORPORATE SOURCE: Chemistry Department, Faculty of Science, Al-Azhar University, Nasr City, Cairo, Egypt
SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (2009), 184(2), 291-308
CODEN: PSSLEC; ISSN: 1042-6507
PUBLISHER: Taylor & Francis, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 151:267012
AB 4-(5-Amino-4-cyano-1-p-tolyl-1H-pyrrol-3-yl)-N,N-dimethylbenzenesulfonamide was prepared and converted to several pyrrolo[2,3-d]pyrimidin-5-yl-N,N-dimethylbenzenesulfonamides. Cyclocondensation of 4-(3-amino-4-imino-7-p-tolyl-4,7-dihydro-3H-pyrrolo[2,3-d]pyrimidin-5-yl)-N,N-dimethylbenzenesulfonamide with different electrophilic carbon reagents afforded several 4-(N,N-dimethylaminosulfonylphenyl)pyrrolo[3,2-e][1,2,4]triazolo[1,5-c]pyrimidines; IR, 1HNMR, and mass spectra of the newly synthesized compds. were recorded. Most of the obtained compds. were screened against
Gram-pos. and Gram-neg. bacteria and fungi, for which some of these derivs. gave promising results.
IT 1180530-12-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis of pyrrolo[2,3-d]pyrimidines and pyrrolo[3,2-e][1,2,4]triazolo[1,5-c]pyrimidine containing the dimethylsulfonamide moiety)
RN 1180530-12-4 CAPLUS
CN Benzenesulfonamide, 4-[4,7-dihydro-7-(4-methylphenyl)-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-5-yl]-N,N-dimethyl- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

L4 ANSWER 12 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(1 CITINGS)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2008:353001 CAPLUS
DOCUMENT NUMBER: 148:355828
TITLE: Multi-functional small molecules as anti-proliferative agents and their preparation
INVENTOR(S): Cai, Xiong; Qian, Changgeng; Gould, Stephen; Zhai, Haixiao
PATENT ASSIGNEE(S): Curis, Inc., USA
SOURCE: PCT Int. Appl., 494pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008033747	A2	20080320	WO 2007-US77971	20070910
WO 2008033747	A9	20080724		
WO 2008033747	A3	20081204		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

AU 2007296744	A1	20080320	AU 2007-296744	20070910
CA 2662937	A1	20080320	CA 2007-2662937	20070910
US 20080221132	A1	20080911	US 2007-852458	20070910
EP 2061772	A2	20090527	EP 2007-842112	20070910

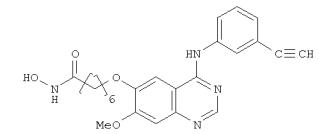
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS

KR 2009077914	A	20090716	KR 2009-707573	20070910
JP 2010502743	T	20100128	JP 2009-527602	20070910
IN 2009DN02146	A	20090731	IN 2009-DN2146	20090331
CN 101641338	A	20100203	CN 2007-80041808	20090511

PRIORITY APPLN. INFO.: US 2006-843590P P 20060911
US 2007-895889P P 20070320
WO 2007-US77971 W 20070910

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 148:355828
GI

L4 ANSWER 13 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

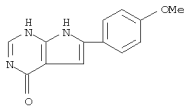


A—B—C I II

AB The invention relates to the compns., methods, and applications of an approach to selective inhibition of several cellular or mol. targets with a single small mol. More specifically, the present invention relates to multi-functional small mols. of formula I wherein one functionality is capable of inhibiting histone deacetylases (HDAC) and the other functionality is capable of inhibiting a different cellular or mol. pathway involved in aberrant cell proliferation, differentiation or survival. Compds. of formula I wherein A is a pharmacophore of an anticancer agent capable of inhibiting at least one cellular or mol. pathway involved in the aberrant cell proliferation, differentiation or survival; B is a linker; C is a zinc-binding moiety; and their geometrical isomers, enantiomers, diastereoisomers, racemates, pharmaceutically acceptable salts, prodrugs and solvates thereof, are claimed. Example compound II was prepared by a multistep procedure (procedure given). All the invention compds. were evaluated for their antiproliferative activity (some data given).

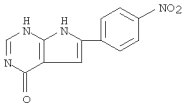
IT 173458-97-4P 187724-89-6P 1011716-97-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of multi-functional small mols. as antiproliferative agents)

RN 173458-97-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)- (CA INDEX NAME)

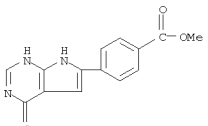


RN 187724-89-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-nitrophenyl)- (CA INDEX NAME)

L4 ANSWER 13 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 1011716-97-4 CAPLUS
CN Benzoic acid, 4-(4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-6-yl)-, methyl ester (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L4 ANSWER 14 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2008:351928 CAPLUS
DOCUMENT NUMBER: 148:355814
TITLE: Preparation of (aralkylamino)(phenyl)pyrrolo[2,3-d]pyrimidine derivatives for use as protein tyrosine kinase (PTK) inhibitors
INVENTOR(S): Cai, Xiong; Qian, Changgeng; Gould, Stephen
PATENT ASSIGNEE(S): Curis, Inc., USA
SOURCE: PCT Int. Appl., 123pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008033745	A2	20080320	WO 2007-US77968	20070910
WO 2008033745	A3	20090108		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

US 20080161320	A1	20080703	US 2007-852440	20070910

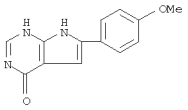
PRIORITY APPLN. INFO.: US 2006-843646P P 20060911
US 2007-895894P P 20070320

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 148:355814; MARPAT 148:355814
GI

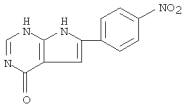
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Fused bicyclic pyrimidine derivs. I and II [Ar = aryl, substituted arylheteroaryl or heteroaryl; Q = absent or (un)substituted alkyl; X = O, S, NH, or alkylamino; Z = O, S, NR1; Y = N or CR2; B = linker; D = C(O)NH2, NHC(S)CH3, CHC(O)NHacyl, etc.; R1 = H or (un)substituted alkyl; R2 = H, halo, (un)substituted aliphatic, aryl or heteroaryl], and their pharmaceutically acceptable salts, are prepared and disclosed as protein tyrosine kinase (PTK) inhibitors. Thus, e.g., III was prepared by N-alkylation of 1,4-dioxa-8-azaspiro[4.5]decane with 6-(4-(chloromethyl)phenyl)-N-((R)-1-phenylethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-amine (preparation given) and deprotection followed by condensation with 6-aminohexanoic acid Me ester and amidation with hydroxylamine. Select I were evaluated in EGFR assays, e.g., III demonstrated an IC50 value of ≤0.1 (μM).

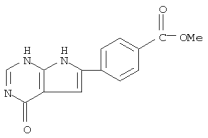
L4 ANSWER 14 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
IT 173458-97-4P, 6-(4-Methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ol 187724-89-6P, 6-(4-Nitrophenyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ol 1011716-97-4P, Methyl 4-(4-hydroxy-7H-pyrrolo[2,3-d]pyrimidin-6-yl)benzoate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of (aralkylamino)(phenyl)pyrrolopyrimidine derivs. for use as
protein tyrosine kinase (PTK) inhibitors)
RN 173458-97-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)- (CA INDEX NAME)



RN 187724-89-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-nitrophenyl)- (CA INDEX NAME)



RN 1011716-97-4 CAPLUS
CN Benzoic acid, 4-(4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-6-yl)-, methyl ester (CA INDEX NAME)

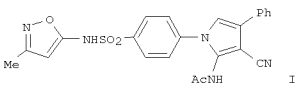


L4 ANSWER 14 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
(3 CITINGS)

L4 ANSWER 15 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

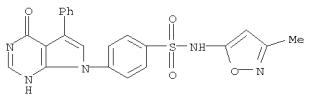
ACCESSION NUMBER: 2008:221151 CAPLUS
DOCUMENT NUMBER: 150:98075
TITLE: Computer-based ligand design and synthesis of some new
sulfonamides bearing pyrrole or pyrrolopyrimidine moieties having potential antitumor and radioprotective activities
AUTHOR(S): Ghorab, Mostafa M.; Heiba, Helmy I.; Khalil, Amira I.;
Abou El Ella, Dalal A.; Noaman, Eman
CORPORATE SOURCE: Department of Drug Radiation Research, National Center
for Radiation Research and Technology (NCRRT), Nasr City, Cairo, Egypt
SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (2008), 183(1), 90-104
CODEN: PSSLEC; ISSN: 1042-6507
PUBLISHER: Taylor & Francis, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 150:98075
GI



I

AB A series of new pyrrole and pyrrolo[2,3-d]pyrimidine derivs. was designed,
synthesized, and biol. evaluated for their in vitro cytotoxic activity. The design of these compds. was based upon the mol. modeling simulation of
the fitting values and conformational energy values of the best-fitted conformers to VEGFRTK inhibitors hypothesis. This hypothesis was generated from its corresponding lead compds. using CATALYST software. Some of the newly synthesized compds. showed interesting cytotoxic activity compared with doxorubicin as a reference drug. These results are
nearly consistent with the mol. modeling studies. Moreover, I showed significant radioprotective activity.
IT 1095565-79-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(computer-based ligand design and synthesis of some new sulfonamides bearing pyrrole or pyrrolopyrimidine moieties with potential antitumor and radioprotective activities)
RN 1095565-79-9 CAPLUS
CN Benzenesulfonamide, 4-(3,4-dihydro-4-oxo-5-phenyl-7H-pyrrolo[2,3-d]pyrimidin-7-yl)-N-(3-methyl-5-isoxazolyl)- (CA INDEX NAME)

L4 ANSWER 15 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
(3 CITINGS)
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2007:863627 CAPLUS
DOCUMENT NUMBER: 147:235192
TITLE: Preparation of urea derivatives containing nitrogenous
aromatic ring compounds as inhibitors of angiogenesis
INVENTOR(S): Funahashi, Yasuhiro; Tsuruoka, Akihiko; Matsukura, Masayuki; Haneda, Toru; Fukuda, Yoshio; Kamata, Junichi; Takahashi, Keiko; Matsushima, Tomohiro; Miyazaki, Kazuki; Nomoto, Ken-Ichi; Watanabe, Tatsuo; Obaishi, Hiroshi; Yamaguchi, Atsumi; Suzuki, Sachi; Nakamura, Katsuji; Mimura, Fusayo; Yamamoto, Yuji; Matsui, Junji; Matsui, Kenji; Yoshiba, Takako; Suzuki,
Yasuyuki; Arimoto, Itaru
PATENT ASSIGNEE(S): Eisai Co., Ltd, Japan
SOURCE: U.S., 458pp., Cont.-in-part of Appl. No. PCT/JP01/09221.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 7253286	B2	20070807	US 2003-420466	20030418
US 20040053908	A1	20040318		
WO 2002032872	A1	20020425	WO 2001-JP9221	20011019
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1506962	A2	20050216	EP 2004-25700	20011019
EP 1506962	A3	20050302		
EP 1506962	B1	20080702		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
EP 1777218	A1	20070425	EP 2006-23078	20011019
EP 1777218	B1	20081231		
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR				
CN 101024627	A	20070829	CN 2007-10007096	20011019
CN 101029022	A	20070905	CN 2007-10007097	20011019
ES 2282299	T3	20071016	ES 2001-976786	20011019
ZA 2003003567	A	20040810	ZA 2003-3567	20030508
JP 2005272474	A	20051006	JP 2005-124034	20050421
JP 4354929	B2	20091028		
US 20060247259	A1	20061102	US 2005-293785	20051202
US 7612092	B2	20091103		

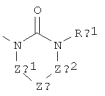
L4 ANSWER 16 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

US 20060160832	A1	20060720	US 2006-347749	20060203
AU 2006203099	A1	20060810	AU 2006-203099	20060719
AU 2006236039	A1	20061207	AU 2006-236039	20061116
AU 2006236039	B2	20080522		
JP 2009215313	A	20090924	JP 2009-123432	20090521

PRIORITY APPLN. INFO.:

JP 2000-320420	A	20001020
JP 2000-386195	A	20001220
JP 2001-46685	A	20010222
WO 2001-JP9221	A2	20011019
AU 2001-295986	A3	20011019
AU 2001-95986	TO	20011019
CN 2001-819710	A3	20011019
EP 2001-976786	A3	20011019
JP 2002-536056	A3	20011019
US 2003-420466	A3	20030418
JP 2005-124034	A3	20050421
US 2005-293785	A1	20051202

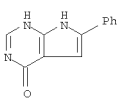
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 147:235192
GI

Q= 

AB N-aryl or N-heteroarylurea derivs. represented by the general formula Ag-Xg-Yg-Tg1 or salts thereof, or hydrates of both [wherein Ag = (un)substituted C6-14 aryl or 5- to 14-membered heterocyclic group; Xg = single bond, O, S, C1-6 alkylene, SO, SO2, (un)substituted NH; Yg = (un)substituted C6-14 aryl, 5- to 14-membered heterocyclic group, C1-8 alkyl, C3-8 alicyclic hydrocarbyl, C6-14 aryl-C1-6 alkyl, 5- to 14-membered heteroaryl-C1-6 alkyl, (CH2)qSO2 (q = 1-8), (CH2)faCH:CH(CH2)fb (fa, fb = 0, 1,2,3), etc.; and Tg1 = a group of the general formula -Eg-CO-NRg1(Zg) or Q; wherein Eg = a single bond,

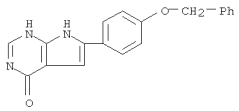
L4 ANSWER 16 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(un)substituted NH; Rg1 = H, (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C3-8 aliph. hydrocarbyl, etc.; Zg = C1-8 alkyl, C3-8 alicyclic hydrocarbyl, C6-14 aryl, etc.; Zg1, Zg2 = (a) a single bond, (b)
C1-6 alkylene optionally having ≥1 atoms selected from O, S, and N in the middle or the terminus of the chain and optionally substituted with
oxo, (c) (un)substituted C2-6 alkenyl] are prepd. These compds. are also inhibitors of vascular endothelial growth factor receptor kinase (VEGFR2 kinase) and are useful as antitumor agents against hemangioma, pancreatic cancer, stomach cancer, colon cancer, breast cancer, prostate cancer, lung
cancer, brain tumor, leukemia, or ovarian cancer, as cancer metastasis inhibitors, and for the treatment of retina neovascularization, diabetic retinopathy, atherosclerosis, or inflammatory diseases such as osteoarthritis, rheumatoid arthritis, psoriasis, or delayed hypersensitivity. Thus, to soln. of 334 mg 4-[6-(4-benzyloxyphenyl)-7-(2-trimethylsilylethoxymethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-2-chlorophenylamine in 4 mL DMF were added 0.066 mL pyridine and 0.102 mL Ph chlorocarbonate and stirred at room temp. for 2.5
h to give 330 mg N-[4-[6-(4-benzyloxyphenyl)-7-(2-trimethylsilylethoxymethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-2-chlorophenyl]-N'-cyclopropylurea which (260 mg) was hydrogenolyzed over platinum oxide in ethanol overnight to give 160 mg

N-[4-[6-(4-hydroxyphenyl)-7-(2-trimethylsilylethoxymethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-2-chlorophenyl]-N'-cyclopropylurea (I). I showed IC50 of 0.02 nM for inhibiting the vascular endothelial growth factor (VEGF)-stimulated sandwich tube formation in vascular endothelial cell.
IT 173458-99-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of urea derivs. containing nitrogenous aromatic ring compds. as
angiogenesis inhibitors for prevention or treatment of diseases)
RN 173458-99-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl- (CA INDEX NAME)

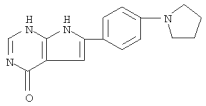


IT 417721-40-5P 417723-61-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of urea derivs. containing nitrogenous aromatic ring compds. as
angiogenesis inhibitors for prevention or treatment of diseases)
RN 417721-40-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-[4-(phenylmethoxy)phenyl]-
(CA INDEX NAME)

L4 ANSWER 16 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

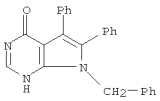


RN 417723-61-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-[4-(1-pyrrolidinyl)phenyl]-
(CA INDEX NAME)



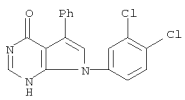
OS.CITING REF COUNT: 28 THERE ARE 28 CAPLUS RECORDS THAT CITE THIS RECORD (39 CITINGS)
REFERENCE COUNT: 117 THERE ARE 117 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2007:450653 CAPLUS
DOCUMENT NUMBER: 147:377588
TITLE: New anti-inflammatory agents
AUTHOR(S): Mohamed, Mosaad S.; Rashad, Aymn E.; Adbel-Monem, Mostafa; Fatahalla, Samar S.
CORPORATE SOURCE: Organic Chemistry Department, Faculty of Pharmacy, Helwan University, Cairo, Egypt
SOURCE: Zeitschrift fuer Naturforschung, C: Journal of Biosciences (2007), 62(1/2), 27-31
CODEN: ZNCBDA; ISSN: 0939-5075
PUBLISHER: Verlag der Zeitschrift fuer Naturforschung
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 147:377588
AB The pyrrole derivs. 1a, b and 2a, b were used as precursors for the preparation of N-substituted pyrrole derivs. 3a, b-9a, b and pyrrolo[2,3-d]pyrimidines 13-16. Also, all the newly prepared products were tested for anti-inflammatory activity as analogs to fenamates, and some of them revealed moderate anti-inflammatory activity compared to the standard drug indomethacin.
IT 173458-79-2P 888941-70-6P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(N-substituted pyrrole derivs. preparation for use as antiinflammatory agents)
RN 173458-79-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl-7-(phenylmethyl)- (CA INDEX NAME)



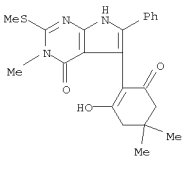
RN 888941-70-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3,4-dichlorophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

L4 ANSWER 17 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

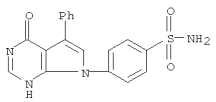
L4 ANSWER 18 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2006:907892 CAPLUS
DOCUMENT NUMBER: 146:348080
TITLE: 5-(2-Hydroxy-4,4-dimethyl-6-oxocyclohex-1-enyl)-3-methyl-2-(methylsulfanyl)-6-phenyl-7H-pyrrolo[2,3-d]pyrimidin-4(3H)-one monohydrate: complex sheets generated by multiple hydrogen bonds
AUTHOR(S): Cruz, Silvia; Quiroga, Jairo; de la Torre, Jose M.; Cobo, Justo; Low, John N.; Glidewell, Christopher
CORPORATE SOURCE: Departamento de Quimica, Universidad de Narino, Ciudad Universitaria, Torobaja, Pasto, AA 1175, Colombia
SOURCE: Acta Crystallographica, Section C: Crystal Structure Communications (2006), C62(9), o554-o556
CODEN: ACSCEE; ISSN: 0108-2701
PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In 5-(2-hydroxy-4,4-dimethyl-6-oxocyclohex-1-enyl)-3-methyl-2-(methylsulfanyl)-6-phenyl-7H-pyrrolo[2,3-d]pyrimidin-4(3H)-one monohydrate, C22H23N3O3S·H2O, the nonarom. carbocyclic ring adopts a half-chair conformation. The mols. are linked into complex sheets by a combination of 1 N-H···O H bond and 3 O-H···O H bonds. Crystallog. data are given.
IT 929097-70-1
RL: PRP (Properties)
(preparation and crystal and mol. structure of)
RN 929097-70-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-(2-hydroxy-4,4-dimethyl-6-oxo-1-cyclohexen-1-yl)-3-methyl-2-(methylthio)-6-phenyl-, hydrate (1:1) (CA INDEX NAME)



● H2O

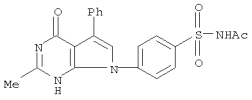
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2006:791813 CAPLUS
DOCUMENT NUMBER: 145:371797
TITLE: Novel antitumor and radioprotective sulfonamides containing pyrrolo[2,3-d]pyrimidines
AUTHOR(S): Ghorab, Moustafa M.; Noaman, Eman; Ismail, Magda M. F.; Heiba, Helmy I.; Ammar, Yousry A.; Sayed, Marwa Y.
CORPORATE SOURCE: Department of Drug Radiation Research, National Centre for Radiation Research and Technology, Nasr City, Egypt
SOURCE: Arzneimittel Forschung (2006), 56(6), 405-413
CODEN: ARZNAD; ISSN: 0004-4172
PUBLISHER: Editio Cantor Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:371797
AB Several sulfonamides having pyrrole (5a-c, 8, 11b-19, 23, 24), pyrrolo[2,3-d]pyrimidine (6, 7, 10, 20, 21, 25) and pyrrolo[2,3-b]pyridine (22) were synthesized and evaluated for their antitumor and radioprotective activities. The structure of the synthesized compds. was elucidated by elemental analyses and spectral data. Compds. 5a, 16, 17, 19, and 23 displayed more potent antitumor activities than the reference drug, doxorubicin. On the other hand compds. 19, 23 and 25 exhibited radioprotective activities.
IT 906096-17-1P 910622-47-8P
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel antitumor and radioprotective sulfonamides containing pyrrolo[2,3-d]pyrimidines)
RN 906096-17-1 CAPLUS
CN Benzenesulfonamide, 4-(3,4-dihydro-4-oxo-5-phenyl-7H-pyrrolo[2,3-d]pyrimidin-7-yl)- (CA INDEX NAME)



RN 910622-47-8 CAPLUS
CN Acetamide, N-[[4-(3,4-dihydro-2-methyl-4-oxo-5-phenyl-7H-pyrrolo[2,3-d]pyrimidin-7-yl)phenyl]sulfonyl]- (CA INDEX NAME)

L4 ANSWER 19 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

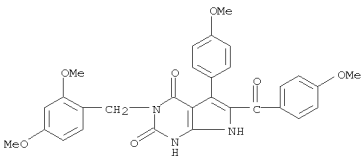
L4 ANSWER 20 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2006:725659 CAPLUS
DOCUMENT NUMBER: 145:356959
TITLE: The application of vinylogous iminium salt derivatives
to an efficient synthesis of the pyrrole containing alkaloids Rigidin and Rigidin E
AUTHOR(S): Gupton, John T.; Banner, Edith J.; Scharf, Austin B.; Norwood, Bradley K.; Kanters, Rene P. F.; Dominey, Raymond N.; Hempel, Jonathan E.; Kharlamova, Anastasia; Bluhn-Chertudi, Itta; Hickenboth, Charles R.; Little, Barrett A.; Sartin, Melissa D.; Coppock, Matthew B.; Krumpe, Keith E.; Burnham, Bruce S.; Holt,
Herman; Du, Karen X.; Keertikar, Kartik M.; Diebes, Anthony; Ghassemi, Shahnaz; Sikorski, James A.
CORPORATE SOURCE: Department of Chemistry, University of Richmond, Richmond, VA, 23173, USA
SOURCE: Tetrahedron (2006), 62(35), 8243-8255
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:356959
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

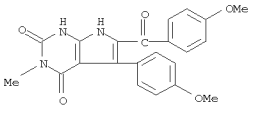
AB Rigidin and rigidin E I (R = H, Me) are prepared in four steps from diphenylpyrrolecarboxylate II, an intermediate previously used for the synthesis of polycitones. Aminocarbonylation of II with molybdenum hexacarbonyl and either 2,4-dimethoxybenzylamine or methylamine, hydrolysis of the esters, Curtius rearrangement of the free acids with diphenylphosphoryl azide in toluene with comcomitant cyclocondensation, and O-demethylation with boron tribromide in methylene chloride yields I (R = H, Me). β-Chloro-α-formyl-α,β-unsatd. ester 4-MeOC6H4C(Cl):C(OHC)CO2Et (III) is prepared in two steps from Et 4-methoxybenzoylacetate and DMF di-Me acetal; cyclocondensation of III with 4-methoxyphenacylamine p-toluenesulfonate salt (IV) in DMF yields the
(methoxybenzoyl)(methoxyphenyl)pyrrolecarboxylate V (R1 = MeO; R2 = R3 = H) in 45-48% yield, while cyclocondensation of III and IV in DMF with sodium hydride provides the regioisomeric pyrrolecarboxylate VI in 86% yield. V (R1 = R2 = R3 = H) (VII) is prepared in two steps from Et benzoylacetate and phenylacylamine hydrochloride; methylation of VII provides V (R1 = R2 = H; R3 = Me), while nitration of VII with nitronium tetrafluoroborate or bromination of VII with N-bromosuccinimide provide V (R1 = R3 = H; R2 = O2N, Br).
IT 910239-67-7P 910239-68-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of rigidin and rigidin E in four steps from an intermediate in

L4 ANSWER 20 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
the synthesis of polycitones)
RN 910239-67-7 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,

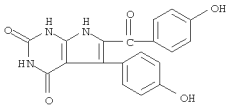
3-[(2,4-dimethoxyphenyl)methyl]-6-(4-methoxybenzoyl)-5-(4-methoxyphenyl)- (CA INDEX NAME)



RN 910239-68-8 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,
6-(4-methoxybenzoyl)-5-(4-methoxyphenyl)-3-methyl- (CA INDEX NAME)

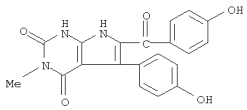


IT 132160-44-2P, Rigidin 721960-13-0P, Rigidine E
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of rigidin and rigidin E in four steps from an intermediate in
the synthesis of polycitones)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,
6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)



RN 721960-13-0 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,

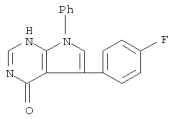
L4 ANSWER 20 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)-3-methyl- (CA INDEX NAME)



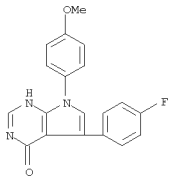
OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 21 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2006:616074 CAPLUS
DOCUMENT NUMBER: 145:271725
TITLE: Synthesis of fused tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines and their reductive conversion to new 4-aminopyrrolo[2,3-d]pyrimidines
AUTHOR(S): Desai, Nirmal D.
CORPORATE SOURCE: Loyola Center for Research and Development, St. Xavier's College, Navrangpura, Ahmedabad, India
SOURCE: Synthetic Communications (2006), 36(15), 2169-2182
CODEN: SYNCAV; ISSN: 0039-7911
PUBLISHER: Taylor & Francis, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:271725
AB Some new 7,9-substituted 7H-1,2,3,4-tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines were synthesized either by diazotization of 4-hydrazino-5,7-disubstituted-7H-pyrrolo[2,3-d]pyrimidines obtained by hydrazinolysis of 4-chloro-5,7-disubstituted 7H-pyrrolo[2,3-d]pyrimidines or via a substitution reaction between 4-chloro-5,7-disubstituted 7H-pyrrolo[2,3-d]pyrimidines and sodium azide. 5,7-Disubstituted-7H-pyrrolo[2,3-d]pyrimidin-4(3H)-ones were obtained by cyclocondensation of 1,4-disubstituted 2-amino-3-cyanopyrroles with formic acid, which, on chlorination using phosphorus oxychloride, afforded 4-chloro-5,7-disubstituted 7H-pyrrolo[2,3-d]pyrimidines. 2-Amino-3-cyanopyrroles were synthesized from the reaction between (2-bromo-1-(4-fluorophenyl) ethylidene) propanedinitrile and substituted aromatic amines under Gewald reaction conditions. A novel route for the synthesis of 4-amino-5,7-disubstituted-7H-pyrrolo[2,3-d]pyrimidines by the reductive ring cleavage of 7H-1,2,3,4-tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines was reported.
IT 907585-49-3P 907585-50-6P 907585-51-7P
907585-52-8P 907585-53-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of fused tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines and their reductive conversion to 4-aminopyrrolo[2,3-d]pyrimidines)
RN 907585-49-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-fluorophenyl)-3,7-dihydro-7-phenyl- (CA INDEX NAME)

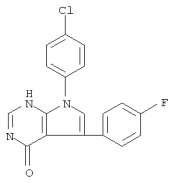
L4 ANSWER 21 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 907585-50-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-fluorophenyl)-3,7-dihydro-7-(4-methoxyphenyl)- (CA INDEX NAME)

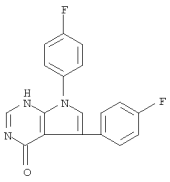


RN 907585-51-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-chlorophenyl)-5-(4-fluorophenyl)-3,7-dihydro- (CA INDEX NAME)

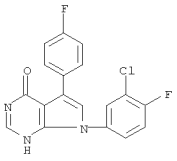


RN 907585-52-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5,7-bis(4-fluorophenyl)-3,7-dihydro- (CA INDEX NAME)

L4 ANSWER 21 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

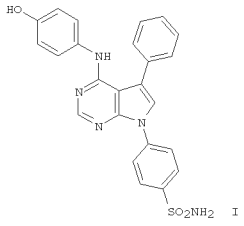


RN 907585-53-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3-chloro-4-fluorophenyl)-5-(4-fluorophenyl)-3,7-dihydro- (CA INDEX NAME)



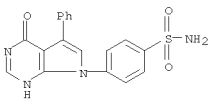
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 22 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2006:519289 CAPLUS
DOCUMENT NUMBER: 145:249164
TITLE: Novel synthesis of pyrrolo[2,3-d] pyrimidines bearing sulfonamide moieties as potential antitumor and radioprotective agents
AUTHOR(S): Ismail, Magda M. F.; Ghorab, Mostafa M.; Noaman, Eman; Ammar, Yousry A.; Heiba, Helmy I.; Sayed, Marwa Y.
CORPORATE SOURCE: Department of Pharmaceutical Chemistry, Faculty of Pharmacy (Girls), Al-Azhar University, Cairo, Egypt
SOURCE: Arzneimittel Forschung (2006), 56(4), 301-308
CODEN: ARZNAD; ISSN: 0004-4172
PUBLISHER: Editio Cantor Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:249164
GI



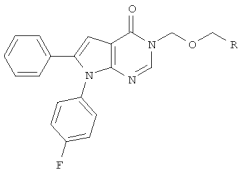
AB A novel series of pyrrolo[2,3-d] pyrimidines bearing sulfonamide moieties have been synthesized and tested for their antitumor activity. Among them, five compds. showed promising antitumor activity. Moreover, compound I exhibited also radioprotective activity. The structures of the newly synthesized compds. were established by their elemental analyses and spectral data.
IT 906096-17-1P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation and antitumor activity of chloro(pyrrolo)pyrimidine derivative via heterocyclization of (cyano)amino(aryl)pyrrole bearing (aryl)sulfonamide moiety with formic acid followed by chlorination with POCl3)
RN 906096-17-1 CAPLUS
CN Benzenesulfonamide, 4-(3,4-dihydro-4-oxo-5-phenyl-7H-pyrrolo[2,3-d]pyrimidin-7-yl)- (CA INDEX NAME)

L4 ANSWER 22 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

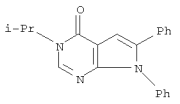
L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2006:452347 CAPLUS
DOCUMENT NUMBER: 145:167193
TITLE: Synthesis of non-nucleosides: influence of 7- and 1,3-substituents of new pyrrolo[2,3-d]pyrimidin-4-ones on antiviral activity
AUTHOR(S): Hilmy, Khalid Mohammed Hassan
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Minoufiya University, Shebin El-Kom, Egypt
SOURCE: Archiv der Pharmazie (Weinheim, Germany) (2006), 339(4), 174-181
CODEN: ARPMAS; ISSN: 0365-6233
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:167193
GI



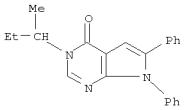
I

AB A series of substituted diaryl pyrrolo[2,3-d]pyrimidin-4-ones were synthesized, e.g., I (R = Me or Ph). 2-Amino-3-pyrrolocarbonitriles were cyclized with formic acid (85%) to afford pyrrolo[2,3-d]pyrimidin-4-ones. Then, the latter compds. were reacted with alkyl halides in the presence of NaH in dry DMF to give the title compds., which were evaluated for activity against herpes simplex virus type-II (HSV-II).
IT 901782-10-3P 901782-11-4P 901782-12-5P
901782-13-6P 901782-14-7P 901782-15-8P
901782-16-9P 901782-17-0P 901782-18-1P
901782-19-2P 901782-20-5P 901782-21-6P
901782-22-7P 901782-23-8P 901782-24-9P
901782-25-0P 901782-26-1P 901782-27-2P
901782-28-3P 901782-29-4P 901782-30-7P
901782-31-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antiviral activity of substituted diaryl(pyrrolo)pyrimidinones via heterocyclization of (amino)diaryl(pyrrolo)carbonitriles with formic acid followed by

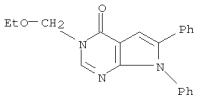
L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
alkylation with alkyl halides)
RN 901782-10-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3-(1-methylethyl)-6,7-diphenyl- (CA INDEX NAME)



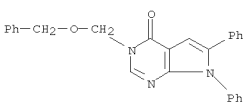
RN 901782-11-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3-(1-methylpropyl)-6,7-diphenyl- (CA INDEX NAME)



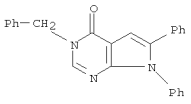
RN 901782-12-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3-(ethoxymethyl)-3,7-dihydro-6,7-diphenyl- (CA INDEX NAME)



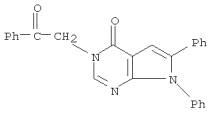
RN 901782-13-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6,7-diphenyl-3-[(phenylmethoxy)methyl]- (CA INDEX NAME)



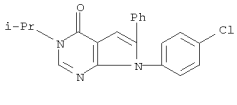
L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 901782-14-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6,7-diphenyl-3-(phenylmethyl)- (CA INDEX NAME)



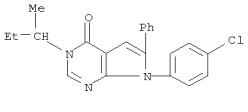
RN 901782-15-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3-(2-oxo-2-phenylethyl)-6,7-diphenyl- (CA INDEX NAME)



RN 901782-16-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-chlorophenyl)-3,7-dihydro-3-(1-methylethyl)-6-phenyl- (CA INDEX NAME)

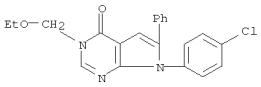


RN 901782-17-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-chlorophenyl)-3,7-dihydro-3-(1-methylpropyl)-6-phenyl- (CA INDEX NAME)

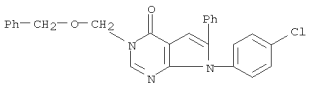


RN 901782-18-1 CAPLUS

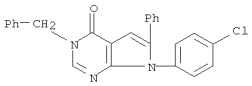
L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-chlorophenyl)-3-(ethoxymethyl)-3,7-
dihydro-6-phenyl- (CA INDEX NAME)



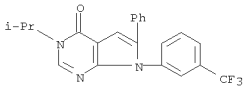
RN 901782-19-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-chlorophenyl)-3,7-dihydro-6-phenyl-
3-[(phenylmethoxy)methyl]- (CA INDEX NAME)



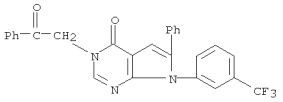
RN 901782-20-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-chlorophenyl)-3,7-dihydro-6-phenyl-
3-(phenylmethyl)- (CA INDEX NAME)



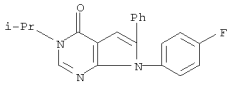
RN 901782-21-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
3,7-dihydro-3-(1-methylethyl)-6-phenyl-7-
[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



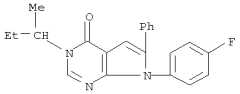
L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



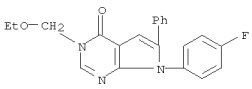
RN 901782-26-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-3-(1-
methylethyl)-6-phenyl- (CA INDEX NAME)



RN 901782-27-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-3-(1-
methylpropyl)-6-phenyl- (CA INDEX NAME)



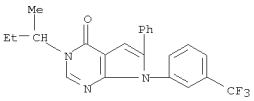
RN 901782-28-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
3-(ethoxymethyl)-7-(4-fluorophenyl)-3,7-
dihydro-6-phenyl- (CA INDEX NAME)



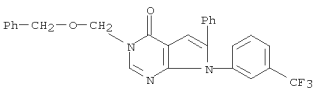
RN 901782-29-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-fluorophenyl)-3,7-dihydro-6-phenyl-
3-[(phenylmethoxy)methyl]- (CA INDEX NAME)

L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

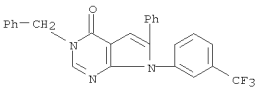
RN 901782-22-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
3,7-dihydro-3-(1-methylpropyl)-6-phenyl-
7-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 901782-23-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl-3-
[(phenylmethoxy)methyl]-7-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

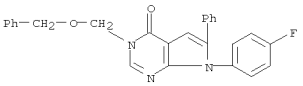


RN 901782-24-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
3,7-dihydro-6-phenyl-3-(phenylmethyl)-7-
[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

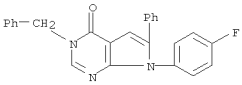


RN 901782-25-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3-(2-oxo-2-phenylethyl)-6-
phenyl-7-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

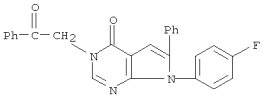
L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 901782-30-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-fluorophenyl)-3,7-dihydro-6-phenyl-
3-(phenylmethyl)- (CA INDEX NAME)

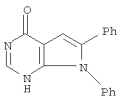


RN 901782-31-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-fluorophenyl)-3,7-dihydro-3-(2-oxo-
2-phenylethyl)-6-phenyl- (CA INDEX NAME)

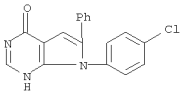


IT 473289-23-5P 473289-24-6P 901782-08-9P
901782-09-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and antiviral activity of substituted
diaryl(pyrrolo)pyrimidinones via heterocyclization of
(amino)diaryl(pyrrolo)carbonitriles with formic acid followed by
alkylation with alkyl halides)
RN 473289-23-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6,7-diphenyl- (CA INDEX
NAME)

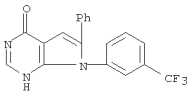
L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



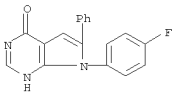
RN 473289-24-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-chlorophenyl)-3,7-dihydro-6-phenyl-
(CA INDEX NAME)



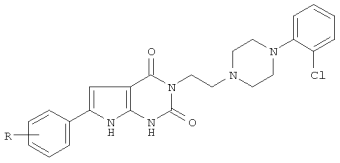
RN 901782-08-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl-7-[3-
(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 901782-09-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
7-(4-fluorophenyl)-3,7-dihydro-6-phenyl-
(CA INDEX NAME)



L4 ANSWER 24 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:1241408 CAPLUS
DOCUMENT NUMBER: 144:128935
TITLE: 3-Arylpiperazinylethyl-1H-pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione derivatives as novel, high-affinity and selective α1-adrenoceptor ligands
AUTHOR(S): Pittala, Valeria; Romeo, Giuseppe; Salerno, Loredana; Siracusa, Maria Angela; Modica, Maria; Materia, Luisa; Mereghetti, Ilario; Cagnotto, Alfredo; Mennini, Tiziana; Marucci, Gabriella; Angeli, Piero; Russo, Filippo
CORPORATE SOURCE: Dipartimento di Scienze Farmaceutiche, Universita di Catania, Catania, 95125, Italy
SOURCE: Bioorganic & Medicinal Chemistry Letters (2006), 16(1), 150-153
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:128935
GI



I

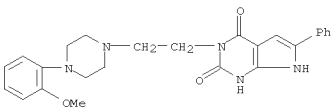
AB The discovery of a new series of selective and high-affinity α1-adrenoceptor (α1-AR) ligands, characterized by a 1H-pyrrolo[2,3-d]-pyrimidine-2,4(3H,7H)-dione system, is described. Some synthesized compds., including I [R = 2-OMe, 2-Me, 4-Cl], displayed affinity in the nanomolar range for α1-ARs and substantial selectivity with respect to 5-HT1A and dopaminergic D1 and D2 receptors. Functional assays, performed on selected derivs., showed antagonistic properties.

IT 255713-59-8P 873192-85-9P 873192-86-0P
873192-87-1P 873192-88-2P 873192-89-3P
873192-90-6P 873192-91-7P 873192-92-8P
873192-93-9P 873192-94-0P 873192-95-1P
873192-96-2P 873192-97-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of 3-arylpiperazinylethyl-1H-pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-diones as high-affinity and selective α1-adrenoceptor ligands)

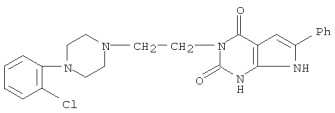
RN 255713-59-8 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,
3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-6-phenyl- (CA INDEX NAME)

L4 ANSWER 23 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
(3 CITINGS)
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

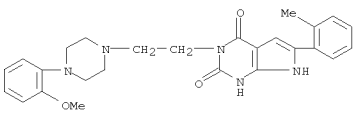
L4 ANSWER 24 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



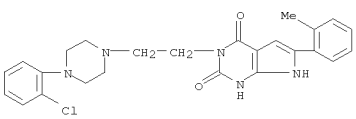
RN 873192-85-9 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,
3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-6-phenyl- (CA INDEX NAME)



RN 873192-86-0 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,
3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-6-(2-methylphenyl)- (CA INDEX NAME)

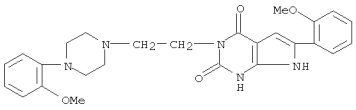


RN 873192-87-1 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,
3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-6-(2-methylphenyl)- (CA INDEX NAME)

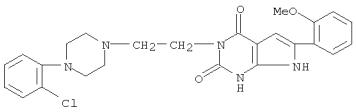


L4 ANSWER 24 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

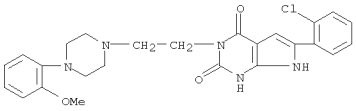
RN 873192-88-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(2-methoxyphenyl)-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (CA INDEX NAME)



RN 873192-89-3 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-6-(2-methoxyphenyl)- (CA INDEX NAME)

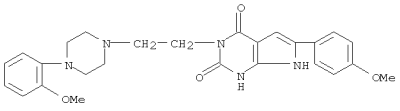


RN 873192-90-6 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(2-chlorophenyl)-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (CA INDEX NAME)

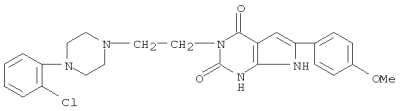


RN 873192-91-7 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(2-chlorophenyl)-3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]- (CA INDEX NAME)

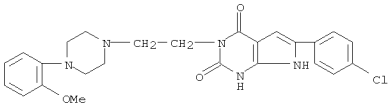
L4 ANSWER 24 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



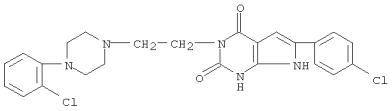
RN 873192-95-1 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-6-(4-methoxyphenyl)- (CA INDEX NAME)



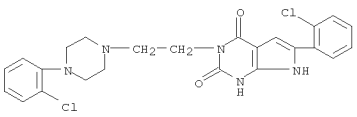
RN 873192-96-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-chlorophenyl)-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (CA INDEX NAME)



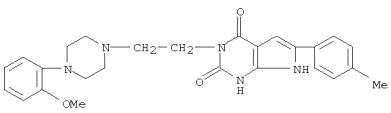
RN 873192-97-3 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-chlorophenyl)-3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]- (CA INDEX NAME)



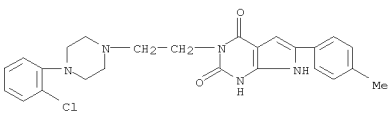
L4 ANSWER 24 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 873192-92-8 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-6-(4-methylphenyl)- (CA INDEX NAME)



RN 873192-93-9 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-6-(4-methylphenyl)- (CA INDEX NAME)



RN 873192-94-0 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-methoxyphenyl)-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (CA INDEX NAME)

L4 ANSWER 24 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

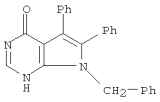
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 25 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:1226426 CAPLUS
DOCUMENT NUMBER: 145:27943
TITLE: Synthesis and antimicrobial screening of some fused heterocyclic pyrroles
AUTHOR(S): Mohamed, Mousad S.; Rashad, Aymn E.; Zaki, Magdy E. A.; Fatahala, Samar S.
CORPORATE SOURCE: Organic Chemistry Department Faculty of Pharmacy, Helwan University Cairo, Egypt
SOURCE: Acta Pharmaceutica (Zagreb, Croatia) (2005), 55(3), 237-249
CODEN: ACPHEE; ISSN: 1330-0075
PUBLISHER: Croatian Pharmaceutical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:27943
GI

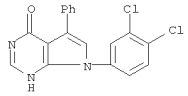
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Pyrrole derivs. were used as precursors for the preparation of pyrrolo[2,3-d]pyrimidine derivs., e.g., I. Also, the formation and structure of different pyrrolotriazolopyrimidine derivs., e.g., II, were discussed. Some of the prepared products showed potent antimicrobial activity.
IT 173458-79-2
RL: PAC (Pharmacological activity); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
(preparation, antibacterial and fungicidal activity of (pyrrolo)pyrimidine derivs. via condensation and heterocyclization of cyano(amino)pyrroles with appropriate reagents)
RN 173458-79-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl-7-(phenylmethyl)- (CA INDEX NAME)



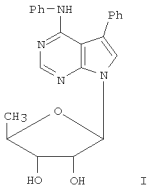
IT 888941-70-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, antibacterial and fungicidal activity of (pyrrolo)pyrimidine derivs. via condensation and heterocyclization of cyano(amino)pyrroles

L4 ANSWER 25 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
with appropriate reagents)
RN 888941-70-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3,4-dichlorophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

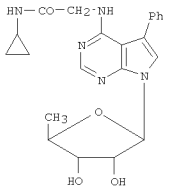


OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 26 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:1168542 CAPLUS
DOCUMENT NUMBER: 144:88499
TITLE: Adenosine Kinase Inhibitors. 6. Synthesis, Water Solubility, and Antinociceptive Activity of 5-Phenyl-7-(5-deoxy-β-D-ribofuranosyl)pyrrolo[2,3-d]pyrimidines Substituted at C4 with Glycinamides and Related Compounds
AUTHOR(S): Bookser, Brett C.; Ugarkar, Bheemarao G.; Matelich, Michael C.; Lemus, Robert H.; Allan, Matthew; Tsuchiya, Megumi; Nakane, Masami; Nagahisa, Atsushi; Wiesner, James B.; Erion, Mark D.
CORPORATE SOURCE: Metabasis Therapeutics, Inc., San Diego, CA, 92121, USA
SOURCE: Journal of Medicinal Chemistry (2005), 48(24), 7808-7820
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:88499
GI



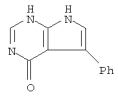
I



II

AB 4-(Phenylamino)-5-phenyl-7-(5-deoxy-β-D-ribofuranosyl)pyrrolo[2,3-d]pyrimidine (I) and related compds. known as "diaryltubercidin" analogs are potent inhibitors of adenosine kinase (AK) and are orally active in animal models of pain such as the rat formalin paw model (GP3269, ED50 = 6.4 mg/kg). However, the utility of this compound class is limited by poor water solubility that can be attributed to the high energy of crystallization caused by stacking of the parallel C4 and C5 aryl rings in the solid state I and GP3269 each with pH 7.4 solubility < 0.05 μg/mL. To increase water solubility, the hydrophobic C4-phenylamino substituent was replaced with a more hydrophilic group, glycinamide. This modification resulted in improved water solubility while retaining AK inhibition potency. Analogs were studied where changes in the glycinamide moiety were combined with changes to the base and sugar. A lead compound, 4-N-(N-cyclopropylcarbamoylmethyl)amino-5-

L4 ANSWER 26 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
phenyl-7-(5-deoxy-β-D-ribofuranosyl)pyrrolo[2,3-d]pyrimidine (II) (IC50 = 3 nM and water soly. = 32 ± 9 μg/mL at pH 7.4), was further characterized in biol. assays. Compd. II exhibited strong oral efficacy in the rat formalin paw model (ED50 of 2.5 mg/kg). In the most advanced assay, II was found to inhibit bradykinin-induced licking in marmoset monkeys with an ED50 estd. at 0.9 mg/kg without producing evidence of side effects such as ataxia, sedation, and emesis at this dose. However, lethal toxicity in the rat formalin paw model occurred with high doses of II, and further work on this series was discontinued.
IT 871671-45-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis, water solubility, and antinociceptive activity of 5-phenyl-7-(5-deoxy-β-D-ribofuranosyl)pyrrolo[2,3-d]pyrimidines substituted at C4 with glycinamides as adenosine kinase inhibitors)
RN 871671-45-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-phenyl- (CA INDEX NAME)



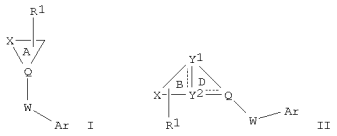
OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:1154366 CAPLUS
DOCUMENT NUMBER: 143:422361
TITLE: Preparation of cyclic compounds as CRF receptor antagonists
INVENTOR(S): Gyorkos, Albert Charles; Corrette, Christopher Peter; Cho, Suk Young; Turner, Timothy Mark; Aso, Kazuyoshi; Kori, Masakuni; Gyoten, Michiyo; Condroski, Kevin Ronald; Siedem, Christopher Stephen; Boyd, Steven Armen
PATENT ASSIGNEE(S): Takeda Pharmaceutical Company Limited, Japan; Et Al.; et al.
SOURCE: PCT Int. Appl., 354 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005099688	A2	20051027	WO 2005-US13583	20050406
WO 2005099688	A3	20070531		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, EP, OA				
CA 2562244	A1	20051027	CA 2005-2562244	20050406
EP 1732541	A2	20061220	EP 2005-741906	20050406
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
JP 2007532580	T	20071115	JP 2007-507576	20050406
US 20070179165	A1	20070802	US 2007-593891	20070405
PRIORITY APPLN. INFO.:			US 2004-560286P P	20040407
			WO 2005-US13583 W	20050406

OTHER SOURCE(S): CASREACT 143:422361; MARPAT 143:422361
GI

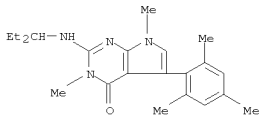


AB There are provided corticotropin-releasing factor (CRF) receptor antagonists of formula (I) and (II) [A, B = each independently 5- or 6-membered ring which may be further substituted; D = 5- or 6-membered ring which may be substituted; R1 = (un)substituted alkyl, substituted amino, hydroxy, etc.; X = CO, O, S, etc.; Y1, Y2, Q = independently (un)substituted C or N; W = a bond, (un)substituted methylene, imino, O, S, etc.; Ar = (un)substituted hetero/aryl; addnl. details are given in the claims; with the exception of certain compds.] or salts thereof or prodrugs thereof. For example, 3-(2,4-dimethylphenyl)-6-dipropylamino-5-methyl-2,5-dihydro-4H-pyrazolo[3,4-d]pyrimidin-4-one was prepared by condensation of 6-hydrazino-3-methylpyrimidine-2,4(1H,3H)-dione (preparation given) with PhCHO, cyclization, chlorination, amination of chloride with di-Pr amine and debenzylation. CRF binding inhibitory rates are tabulated for 7 examples of I. I are useful for treating depression and anxiety (no data).

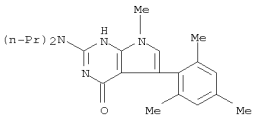
IT 868372-66-1P, 2-[(1-Ethylpropyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868373-48-2P, 2-(Dipropylamino)-5-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-76-9P, 5-[4-(Benzyloxy)-2-fluorophenyl]-2-(dipropylamino)-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-83-8P, 2-(Dipropylamino)-5-mesityl-7-(4-methoxybenzyl)-3-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-84-9P,

2-(Dipropylamino)-5-(2-fluoro-4-hydroxyphenyl)-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-87-2P, 2-(Dipropylamino)-5-mesityl-3-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of cyclic compds. as CRF receptor antagonists with therapeutic potential)

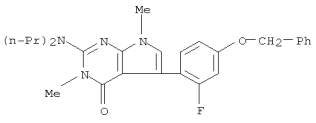
RN 868372-66-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[(1-ethylpropyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



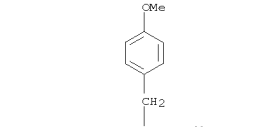
RN 868373-48-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-7-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



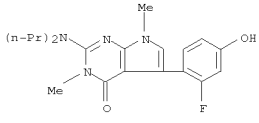
RN 868374-76-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-5-[2-fluoro-4-(phenylmethoxy)phenyl]-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)



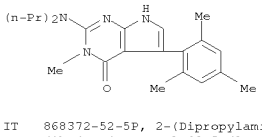
RN 868374-83-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-7-[(4-methoxyphenyl)methyl]-3-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 868374-84-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-5-(2-fluoro-4-hydroxyphenyl)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)



RN 868374-87-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



IT 868372-52-5P, 2-(Dipropylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-55-8P, 2-(Dimethylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-56-9P, 2-(Dibutylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-57-0P, 5-Mesityl-2-[(2-methoxyethyl)amino]-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-58-1P, 2-(Dipropylamino)-3-ethyl-5-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-60-5P,

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
3-Ethyl-5-mesityl-7-methyl-2-(propylamino)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-61-6P,
2-(Dipropylamino)-3-isopropyl-5-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-63-8P,

3-Isopropyl-5-mesityl-7-methyl-2-(propylamino)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-64-9P,
5-Mesityl-3,7-dimethyl-2-(piperidin-1-yl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-65-0P,
2-(Dipropionylamino)-3,7-dimethyl-5-phenyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-68-3P,
2-(Diallylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one monotrifluoroacetate 868372-70-7P,
5-Mesityl-3,7-dimethyl-2-(pyrrolidin-1-yl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-72-9P,
2-[Bis(2-methylprop-2-enyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-74-1P,
2-[Bis(3-methylbutyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-75-2P,
2-[Bis(cyclopropylmethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-76-3P,
2-[Bis(cyclopropylmethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-78-5P,
5-Mesityl-3,7-dimethyl-2-(morpholin-4-yl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-80-9P,
2-(Diethylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-82-1P,
2-(Dipentylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-84-3P,
2-(Diisopropylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-86-5P,
2-(Dibenzylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-88-7P,
2-[Bis(4-methylbenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-90-1P,
2-[Bis(2-phenoxyethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-92-3P,
2-[Bis(2-chlorobenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-94-5P,
2-[Bis(pyridin-3-ylmethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-96-7P,
2-[Bis(4-chlorobenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868372-98-9P,
2-[Bis(pyridin-2-ylmethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868373-00-6P,
2-[Bis[4-(benzyloxy)benzyl]amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868373-02-8P,
2-[Bis(3-methoxybenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868373-04-0P,
2-[Bis(3-chlorobenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868373-06-2P
868373-08-4P, 2-[Bis[3-(1H-pyrrol-1-yl)propyl]amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
868373-10-8P, 2-[Bis(2-naphthylmethyl)amino]-5-mesityl-3,7-

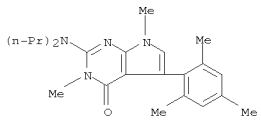
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
868373-12-0P, 2-[Bis(2,5-dimethoxybenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
868373-14-2P, 2-[Bis(quinolin-2-ylmethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
868373-16-4P, 2-[Bis[3-fluoro-5-(trifluoromethyl)benzyl]amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868373-18-6P,
5-Mesityl-3,7-dimethyl-2-[(2-phenoxyethyl)amino]-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868373-20-0P,
2-[(4-Chlorobenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868373-22-2P,
2-[(1,1-Dimethyl-2-oxo-2-phenylethyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
868373-24-4P, 2-[(3-Chlorobenzyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
868373-26-6P, 4'-[[(5-Mesityl-3,7-dimethyl-4-oxo-4,7-dihydro-3H-pyrrolo[2,3-d]pyrimidin-2-yl)amino]methyl]-1,1'-biphenyl-2-carbonitrile trifluoroacetate 868373-28-8P,
5-Mesityl-3,7-dimethyl-2-[(2-naphthylmethyl)amino]-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868373-30-2P,
2-[[3-Fluoro-5-(trifluoromethyl)benzyl]amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
868373-32-4P, 5-Mesityl-3,7-dimethyl-2-[(1-methylbutyl)amino]-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
868373-34-6P, 2-(Cyclopentylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
868373-36-8P, 2-[(1-Ethylbutyl)amino]-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
868373-38-0P, N-(5-Mesityl-3,7-dimethyl-4-oxo-4,7-dihydro-3H-pyrrolo[2,3-d]pyrimidin-2-yl)-2-methylalanine ethyl ester trifluoroacetate
868373-40-4P, 5-Mesityl-3,7-dimethyl-2-[(1-propylbutyl)amino]-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
868373-42-6P, 2-(Isopropylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate
868373-44-8P, 2-(Ethylamino)-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one trifluoroacetate 868373-45-9P
868373-46-0P, 3-(5-Mesityl-3,7-dimethyl-4-oxo-4,7-dihydro-3H-pyrrolo[2,3-d]pyrimidin-2-yl)-1,1-dimethylurea 868373-50-6P,
3-Benzyl-2-(dipropylamino)-5-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868373-51-7P,
2-(Dipropylamino)-5-mesityl-7-methyl-3-(propyn-2-yl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-66-7P,

5-(4-Chloro-2-methylphenyl)-2-(dipropylamino)-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-73-6P,
7-Benzyl-2-(dipropylamino)-5-mesityl-3-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-74-7P,
5-(2,4-Dimethoxyphenyl)-2-(dipropylamino)-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-75-8P,
5-[2,4-Bis(trifluoromethyl)phenyl]-2-(dipropylamino)-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-77-0P,
5-(2,4-Dimethylphenyl)-2-(dipropylamino)-3,7-dimethyl-3,7-dihydro-4H-

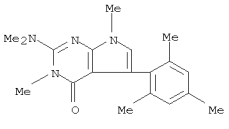
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
pyrrolo[2,3-d]pyrimidin-4-one 868374-78-1P,

2-(Dipropylamino)-5-(4-ethoxy-2-methylphenyl)-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-79-2P,
2-(Dipropylamino)-3,7-dimethyl-5-(2,4,6-trimethoxyphenyl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-80-5P,
5-(2,6-Difluoro-4-methoxyphenyl)-2-(dipropylamino)-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-81-6P,
5-(2,4-Dimethylphenyl)-2-(dipropylamino)-3,6,7-trimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-82-7P,
2-(Dipropylamino)-5-mesityl-3,6,7-trimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-85-0P,

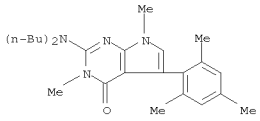
2-(Dipropylamino)-5-(2-fluoro-4-methoxyphenyl)-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-86-1P,
2-(Dipropylamino)-7-ethyl-5-mesityl-3-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-88-3P,
7-Acetyl-2-(dipropylamino)-5-mesityl-3-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-89-4P,
2-(Dipropylamino)-5-mesityl-3-methyl-7-(2-oxopropyl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868374-90-7P,
2-(Dipropylamino)-5-mesityl-3-methyl-7-(3-oxobutyl)-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of cyclic compds. as CRF receptor antagonists with therapeutic potential)
RN 868372-52-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



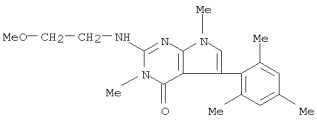
RN 868372-55-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dimethylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



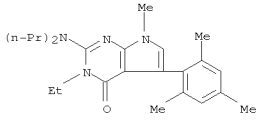
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 868372-56-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dibutylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 868372-57-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-[(2-methoxyethyl)amino]-3,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

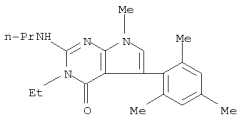


RN 868372-58-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3-ethyl-3,7-dihydro-7-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

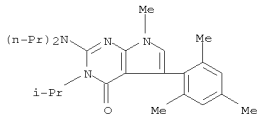


RN 868372-60-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3-ethyl-3,7-dihydro-7-methyl-2-(propylamino)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

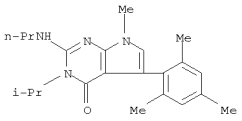
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 868372-61-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
2-(dipropylamino)-3,7-dihydro-7-methyl-3-
(1-methylethyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

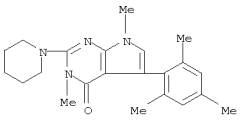


RN 868372-63-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
3,7-dihydro-7-methyl-3-(1-methylethyl)-2-
(propylamino)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

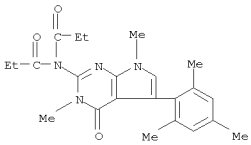


RN 868372-64-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-(1-
piperidinyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



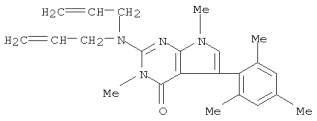
RN 868372-65-0 CAPLUS
CN Propanamide, N-[4,7-dihydro-3,7-dimethyl-4-oxo-5-(2,4,6-trimethylphenyl)-
3H-pyrrolo[2,3-d]pyrimidin-2-yl]-N-(1-oxopropyl)- (CA INDEX NAME)



RN 868372-68-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(di-2-propen-1-ylamino)-3,7-dihydro-
3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:1)
(CA
INDEX NAME)

CM 1

CRN 868372-67-2
CMF C23 H28 N4 O



CM 2

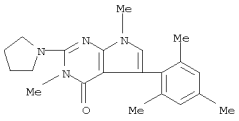
CRN 76-05-1

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CMF C2 H F3 O2

RN 868372-70-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-(1-
pyrrolidinyl)-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?)
(CA INDEX NAME)

CM 1

CRN 868372-69-4
CMF C21 H26 N4 O



CM 2

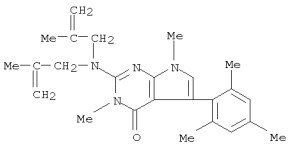
CRN 76-05-1
CMF C2 H F3 O2

RN 868372-72-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
2-[bis(2-methyl-2-propen-1-yl)amino]-3,7-
dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate
(1:?) (CA INDEX NAME)

CM 1

CRN 868372-71-8
CMF C25 H32 N4 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



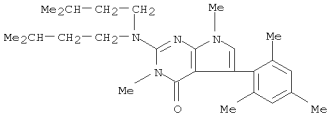
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-74-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
2-[bis(3-methylbutyl)amino]-3,7-dihydro-
3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?)
(CA
INDEX NAME)

CM 1

CRN 868372-73-0
CMF C27 H40 N4 O

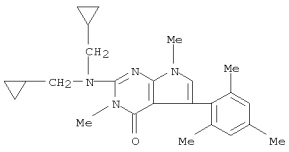


CM 2

CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

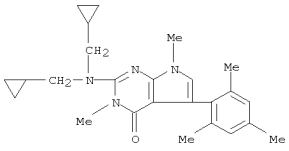
RN 868372-75-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(cyclopropylmethyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 868372-76-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(cyclopropylmethyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

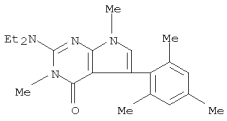
CRN 868372-75-2
CMF C25 H32 N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



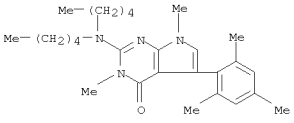
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-82-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipentylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868372-81-0
CMF C27 H40 N4 O



CM 2

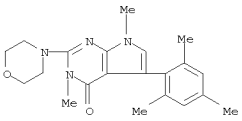
CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868372-78-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-(4-morpholinyl)-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868372-77-4
CMF C21 H26 N4 O2



CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-80-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(diethylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

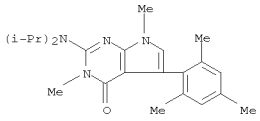
CRN 868372-79-6
CMF C21 H28 N4 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868372-84-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(1-methylethyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868372-83-2
CMF C23 H32 N4 O



CM 2

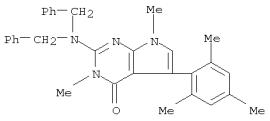
CRN 76-05-1
CMF C2 H F3 O2

RN 868372-86-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(phenylmethyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868372-85-4
CMF C31 H32 N4 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



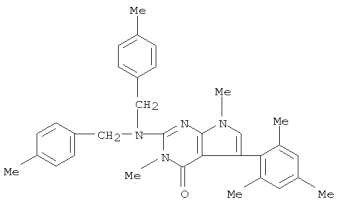
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-88-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
2-[bis[(4-methylphenyl)methyl]amino]-3,7-
dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate
(1:?) (CA INDEX NAME)

CM 1

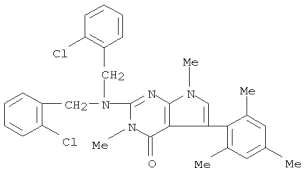
CRN 868372-87-6
CMF C33 H36 N4 O



L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(1:?) (CA INDEX NAME)

CM 1

CRN 868372-91-2
CMF C31 H30 Cl2 N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-94-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(3-pyridinylmethyl)amino]-3,7-
dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate
(1:?) (CA INDEX NAME)

CM 1

CRN 868372-93-4
CMF C29 H30 N6 O

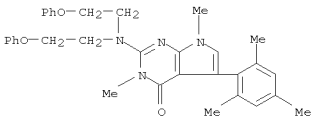
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-90-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
2-[bis(2-phenoxyethyl)amino]-3,7-dihydro-
3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?)
(CA
INDEX NAME)

CM 1

CRN 868372-89-8
CMF C33 H36 N4 O3

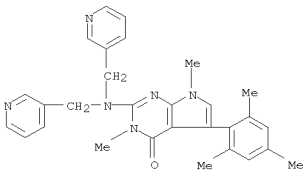


CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-92-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
2-[bis[(2-chlorophenyl)methyl]amino]-3,7-
dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



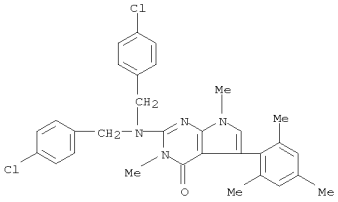
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-96-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one,
2-[bis[(4-chlorophenyl)methyl]amino]-3,7-
dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate
(1:?) (CA INDEX NAME)

CM 1

CRN 868372-95-6
CMF C31 H30 Cl2 N4 O



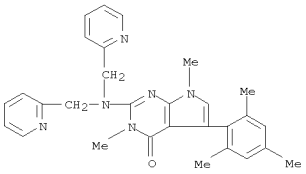
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868372-98-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(2-pyridinylmethyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868372-97-8
CMF C29 H30 N6 O



CM 2

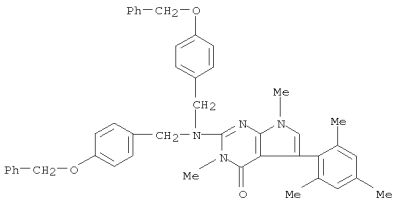
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-00-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[[4-

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(phenylmethoxy)phenyl]methyl]amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868372-99-0
CMF C45 H44 N4 O3



CM 2

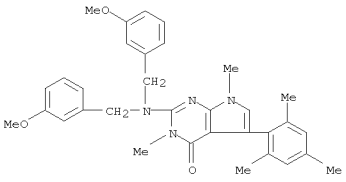
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-02-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[(3-methoxyphenyl)methyl]amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-01-7
CMF C33 H36 N4 O3

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



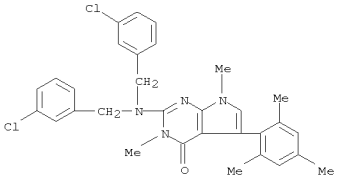
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-04-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[(3-chlorophenyl)methyl]amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-03-9
CMF C31 H30 Cl2 N4 O



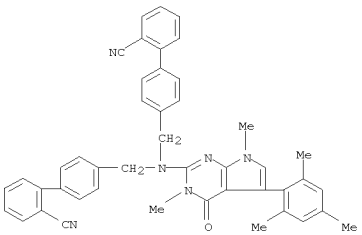
CM 2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-06-2 CAPLUS
CN [1,1'-Biphenyl]-2-carbonitrile, 4'-[[[(2'-cyano[1,1'-biphenyl]-4-yl)methyl][4,7-dihydro-3,7-dimethyl-4-oxo-5-(2,4,6-trimethylphenyl)-3H-pyrrolo[2,3-d]pyrimidin-2-yl]amino]methyl]-, 2,2,2-trifluoroacetate (1:?)
(CA INDEX NAME)

CM 1

CRN 868373-05-1
CMF C45 H38 N6 O



CM 2

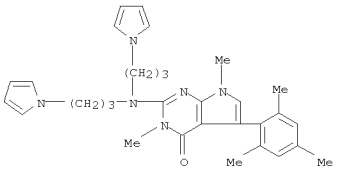
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-08-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[3-(1H-pyrrol-1-yl)propyl]amino]-

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-,
2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-07-3
CMF C31 H38 N6 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-10-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(2-naphthalenylmethyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-09-5
CMF C39 H36 N4 O

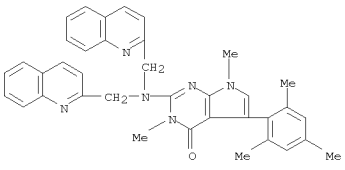
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-14-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis(2-quinolinylmethyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-13-1
CMF C37 H34 N6 O



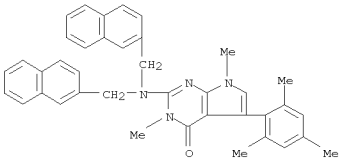
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-16-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[[3-fluoro-5-(trifluoromethyl)phenyl]methyl]amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



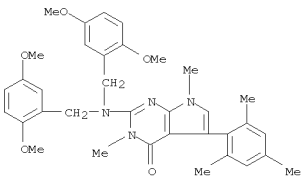
CM 2

CRN 76-05-1
CMF C2 H F3 O2

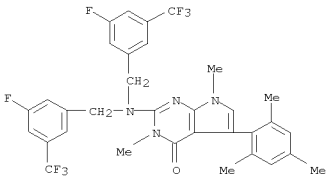
RN 868373-12-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[bis[(2,5-dimethoxyphenyl)methyl]amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-11-9
CMF C35 H40 N4 O5



L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CRN 868373-15-3
CMF C33 H28 F8 N4 O



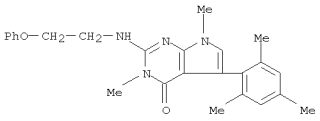
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-18-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-[(2-phenoxyethyl)amino]-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-17-5
CMF C25 H28 N4 O2



CM 2

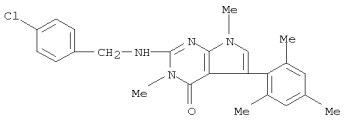
CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868373-20-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[[(4-chlorophenyl)methyl]amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-19-7
CMF C24 H25 Cl N4 O



CM 2

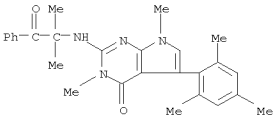
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-22-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[(1,1-dimethyl-2-oxo-2-phenylethyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-21-1
CMF C27 H30 N4 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



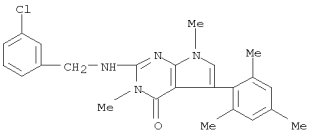
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-24-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[[(3-chlorophenyl)methyl]amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-23-3
CMF C24 H25 Cl N4 O



CM 2

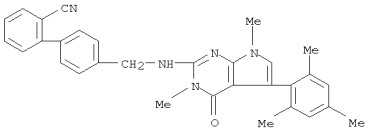
CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868373-26-6 CAPLUS
CN [1,1'-Biphenyl]-2-carbonitrile, 4'-[[[4,7-dihydro-3,7-dimethyl-4-oxo-5-(2,4,6-trimethylphenyl)-3H-pyrrolo[2,3-d]pyrimidin-2-yl]amino]methyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-25-5
CMF C31 H29 N5 O



CM 2

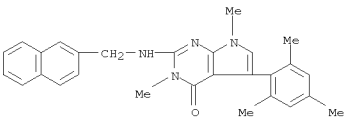
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-28-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-[(2-naphthalenylmethyl)amino]-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-27-7
CMF C28 H28 N4 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



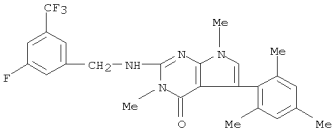
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-30-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[[[3-fluoro-5-(trifluoromethyl)phenyl]methyl]amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-29-9
CMF C25 H24 F4 N4 O



CM 2

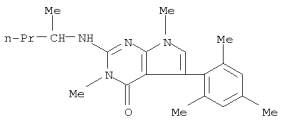
CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868373-32-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-[(1-methylbutyl)amino]-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-31-3
CMF C22 H30 N4 O



CM 2

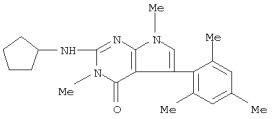
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-34-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(cyclopentylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-33-5
CMF C22 H28 N4 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



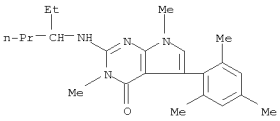
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-36-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[(1-ethylbutyl)amino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-35-7
CMF C23 H32 N4 O



CM 2

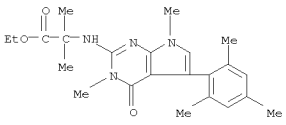
CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868373-38-0 CAPLUS
CN Alanine, N-[4,7-dihydro-3,7-dimethyl-4-oxo-5-(2,4,6-trimethylphenyl)-3H-pyrrolo[2,3-d]pyrimidin-2-yl]-2-methyl-, ethyl ester, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 868373-37-9
CMF C23 H30 N4 O3



CM 2

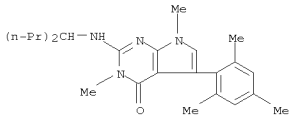
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-40-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-[(1-propylbutyl)amino]-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-39-1
CMF C24 H34 N4 O

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



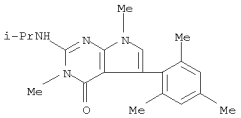
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 868373-42-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-3,7-dimethyl-2-[(1-methylethyl)amino]-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-41-5
CMF C20 H26 N4 O



CM 2

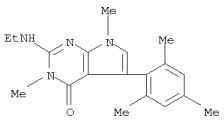
CRN 76-05-1
CMF C2 H F3 O2

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 868373-44-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(ethylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 868373-43-7
CMF C19 H24 N4 O

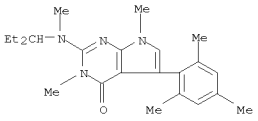


CM 2

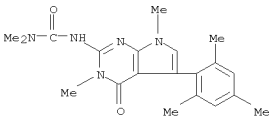
CRN 76-05-1
CMF C2 H F3 O2

RN 868373-45-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-[(1-ethylpropyl)methylamino]-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)-, hydrochloride (1:?) (CA INDEX NAME)

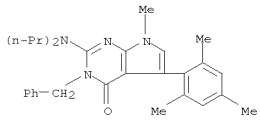
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 868373-46-0 CAPLUS
CN Urea, N'-[4,7-dihydro-3,7-dimethyl-4-oxo-5-(2,4,6-trimethylphenyl)-3H-pyrrolo[2,3-d]pyrimidin-2-yl]-N,N-dimethyl- (CA INDEX NAME)

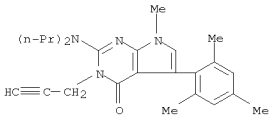


RN 868373-50-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-7-methyl-3-(phenylmethyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

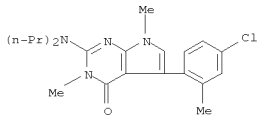


RN 868373-51-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-7-methyl-3-(2-propyn-1-yl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

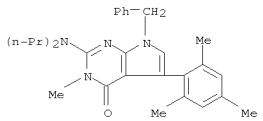
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



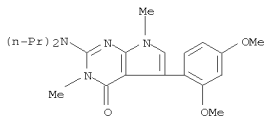
RN 868374-66-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-chloro-2-methylphenyl)-2-(dipropylamino)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)



RN 868374-73-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3-methyl-7-(phenylmethyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

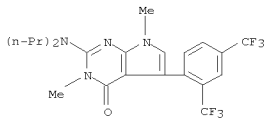


RN 868374-74-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(2,4-dimethoxyphenyl)-2-(dipropylamino)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)

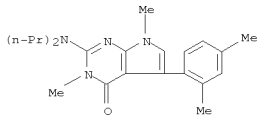


RN 868374-75-8 CAPLUS

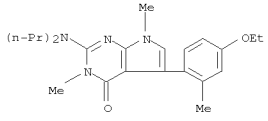
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-[2,4-bis(trifluoromethyl)phenyl]-2-(dipropylamino)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)



RN 868374-77-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(2,4-dimethylphenyl)-2-(dipropylamino)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)

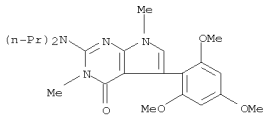


RN 868374-78-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-5-(4-ethoxy-2-methylphenyl)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)

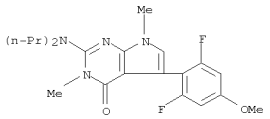


RN 868374-79-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethoxyphenyl)- (CA INDEX NAME)

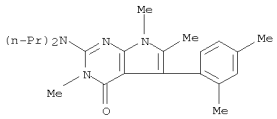
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 868374-80-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(2,6-difluoro-4-methoxyphenyl)-2-(dipropylamino)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)

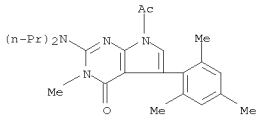


RN 868374-81-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(2,4-dimethylphenyl)-2-(dipropylamino)-3,7-dihydro-3,6,7-trimethyl- (CA INDEX NAME)

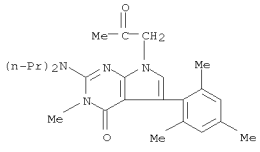


RN 868374-82-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3,6,7-trimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

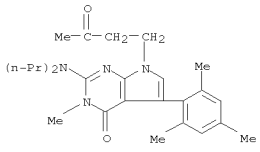
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 868374-89-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3-methyl-7-(2-oxopropyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

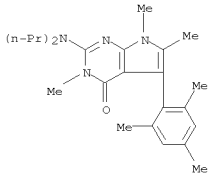


RN 868374-90-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-3,7-dihydro-3-methyl-7-(3-oxobutyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

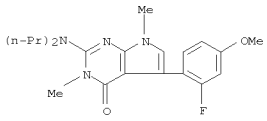


IT 868372-53-6P, 2-Amino-5-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-54-7P, 2-Amino-5-mesityl-3,7-dimethyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-59-2P, 2-Amino-3-ethyl-5-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one 868372-62-7P, 2-Amino-3-isopropyl-5-mesityl-7-methyl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-one
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of cyclic compds. as CRF receptor antagonists

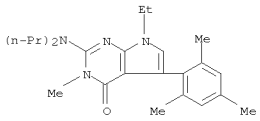
L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 868374-85-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-5-(2-fluoro-4-methoxyphenyl)-3,7-dihydro-3,7-dimethyl- (CA INDEX NAME)



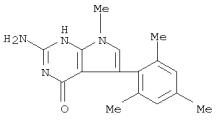
RN 868374-86-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-(dipropylamino)-7-ethyl-3,7-dihydro-3-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



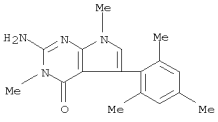
RN 868374-88-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-acetyl-2-(dipropylamino)-3,7-dihydro-3-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
with therapeutic potential)

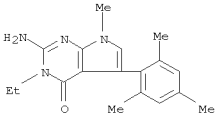
RN 868372-53-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-7-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 868372-54-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-3,7-dimethyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

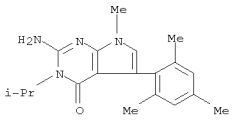


RN 868372-59-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3-ethyl-3,7-dihydro-7-methyl-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



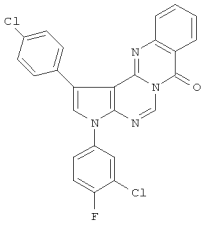
RN 868372-62-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-7-methyl-3-(1-methylethyl)-5-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

L4 ANSWER 27 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD
(5 CITINGS)

L4 ANSWER 28 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:952384 CAPLUS
DOCUMENT NUMBER: 145:27938
TITLE: Syntheses of 1,3-disubstituted-5a-hydropyrrolo[2,3-d]quinazolino[3,2-e]pyrimidin-6(5H)-ones: A comparison of conventional and microwave technique
AUTHOR(S): Augustine, Cicily; Agrawal, Y. K.
CORPORATE SOURCE: Institute of Pharmacy & Science, Nirama University of Science and Technology, Ahmedabad, 382 481, India
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (2005), 44B(8), 1653-1658
CODEN: IJSBDB; ISSN: 0376-4699
PUBLISHER: National Institute of Science Communication and Information Resources
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:27938
GI



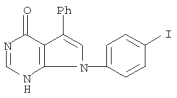
I

AB An exclusive new ring system in 1,3-disubstituted-5a-hydropyrrolo[2,3-d]quinazolino[3,2-e]pyrimidin-6(5H)-ones (e. g. I) has been synthesized from 4-chloropyrrolo[2,3-d]pyrimidines which were prepared using phase transfer catalysts. The synthesis the final pyrimidinones includes a comparative study of the conventional and microwave techniques.

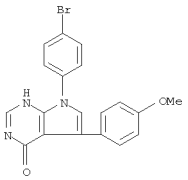
IT 220835-19-8 220835-20-1 220835-21-2
243665-93-2 243665-94-3 243665-95-4
243665-96-5 287177-12-2 889670-19-3
889670-20-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of disubstituted-hydropyrroloquinazolinopyrimidinones via phase transfer-catalyzed chlorination of pyrrolopyrimidinones followed by cyclocondensation with anthranilic acid or ester using conventional or

L4 ANSWER 28 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
microwave heating)

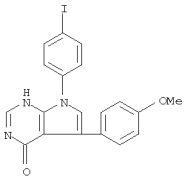
RN 220835-19-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-iodophenyl)-5-phenyl- (CA INDEX NAME)



RN 220835-20-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-bromophenyl)-3,7-dihydro-5-(4-methoxyphenyl)- (CA INDEX NAME)

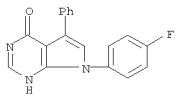


RN 220835-21-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-iodophenyl)-5-(4-methoxyphenyl)- (CA INDEX NAME)

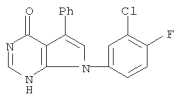


RN 243665-93-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

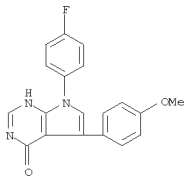
L4 ANSWER 28 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 243665-94-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3-chloro-4-fluorophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

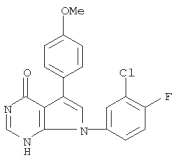


RN 243665-95-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-5-(4-methoxyphenyl)- (CA INDEX NAME)

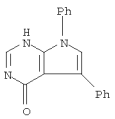


RN 243665-96-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3-chloro-4-fluorophenyl)-3,7-dihydro-5-(4-methoxyphenyl)- (CA INDEX NAME)

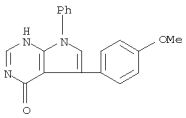
L4 ANSWER 28 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 287177-12-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,7-diphenyl- (CA INDEX NAME)

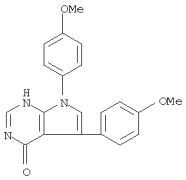


RN 889670-19-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5-(4-methoxyphenyl)-7-phenyl- (CA INDEX NAME)



RN 889670-20-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,7-bis(4-methoxyphenyl)- (CA INDEX NAME)

L4 ANSWER 28 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



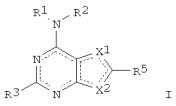
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 29 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:611835 CAPLUS
DOCUMENT NUMBER: 143:133384
TITLE: Preparation of pyrrolopyrimidine derivatives and analogs and their use as inhibitors of epidermal growth factor receptor (EGFR)
INVENTOR(S): Grotzfeld, Robert M.; Patel, Hitesh K.; Mehta, Shamal A.; Milanov, Zdravko V.; Lai, Andiliy G.; Lockhart, David J.
PATENT ASSIGNEE(S): Ambit Biosciences Corp., USA
SOURCE: U.S. Pat. Appl. Publ., 80 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050153989	A1	20050714	US 2005-36241	20050113
US 20050165029	A1	20050728	US 2005-35940	20050113
WO 2005067546	A2	20050728	WO 2005-US1399	20050113
WO 2005067546	A3	20061207		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, SM				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
WO 2005069865	A2	20050804	WO 2005-US1240	20050113
WO 2005069865	A3	20071206		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, SM				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, EP, OA				
US 20050187389	A1	20050825	US 2005-35939	20050113
US 20050239806	A1	20051027	US 2005-35619	20050113

PRIORITY APPLN. INFO.:		
US 2004-536301P	P	20040113
US 2004-602460P	P	20040818
US 2004-602584P	P	20040818
US 2004-602586P	P	20040818

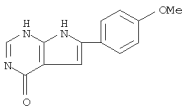
L4 ANSWER 29 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 143:133384; MARPAT 143:133384
GI



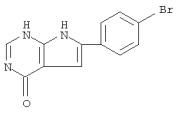
I

AB Aminopyrrolopyrimidine derivs. (I)or pharmaceutically acceptable salts, N-oxides, prodrugs, or solvates thereof or pharmaceutically active metabolites [X1, X2 = N, O, S, (un)substituted NH, CR6 (where R6 = H, (un)substituted heteroaryl or Ph); R1 = -(CHR1a)z-R1b (where R1a = H, C1-4 alkyl, F, C1-4 fluoroalkyl, C1-4 alkoxy, CO2H, CONH2, etc.; z = 0-3; R1b = (un)substituted Ph); R2 = H, (un)substituted alkyl; or R2 and R1 taken together form a substituted fully unsatd. monocyclic heterocycle; R3 = H, L3-(CHR3a)x-R3b (where L3 = a bond, NH, O, S; R3a = H, C1-4 alkyl, F, C1-4 fluoroalkyl, C1-4 alkoxy, mono - or di(C1-4 alkyl)amine; x = 0-3; R3b = H, (un)substituted Ph); R5 = H, (un)substituted Ph; or R6 and R5 taken together form an (un)substituted aromatic carbocycle or heterocycle; or when X1 = CR6 and X2 = (un)substituted NH, R6 and R1 taken together form an (un)substituted 5- or 6-membered aromatic heterocycle] are prepared These compds. modulate kinase activity, in particular epidermal growth factor receptor (EGFR) protein tyrosine kinases, and are useful in the treatment and prevention of a variety of diseases and unwanted conditions mediated by EGFR which include blood vessel growth, cancer, benign hyperplasia, keloid formation, and psoriasis. Thus, 1,5-dihydro-4H-pyrimido[5,4-b]indol-4-one was chlorinated by POCl3 at 100° for 4 h to give 4-chloro-5H-pyrimido[5,4-b]indole which was heated with 3-chloroaniline in n-propanol at 80° for 3 h to give 4-(3-chlorophenylamino)-5H-pyrimido[5,4-b]indole (II). II showed the binding affinity to wild type-EGFR with Kd of <100 nM.
IT 173458-97-4 1057142-92-3
RL: PRPH (Prophetic)
(Preparation of pyrrolopyrimidine derivatives and analogs and their use as inhibitors of epidermal growth factor receptor (EGFR))
RN 173458-97-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)- (CA INDEX NAME)

L4 ANSWER 29 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 1057142-92-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 6-(4-bromophenyl)-3,7-dihydro- (CA INDEX NAME)



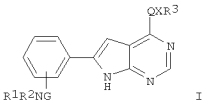
OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
(11 CITINGS)

L4 ANSWER 30 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:1060779 CAPLUS
DOCUMENT NUMBER: 142:38274
TITLE: Preparation of 7H-pyrrolo[2,3-d]pyrimidines as protein tyrosine kinase inhibitors
INVENTOR(S): Bold, Guido; Capraro, Hans-Georg; Caravatti, Giorgio; Traxler, Peter
PATENT ASSIGNEE(S): Novartis AG, Switz.
SOURCE: U.S. Pat. Appl. Publ., 41 pp., Cont.-in-part of U.S. Ser. No. 485,747.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040248911	A1	20041209	US 2004-783000	20040220
US 7323469	B2	20080129		
WO 2003013541	A1	20030220	WO 2002-EP8780	20020806
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
CN 101560214	A	20091021	CN 2009-10137877	20020806
US 20040242600	A1	20041202	US 2004-485747	20040203
US 7244729	B2	20070717		

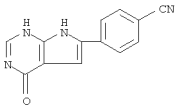
PRIORITY APPLN. INFO.: GB 2001-19249 A 20010807
WO 2002-EP8780 W 20020806
US 2004-485747 A2 20040203
CN 2002-815351 A3 20020806

OTHER SOURCE(S): MARPAT 142:38274
GI



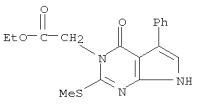
L4 ANSWER 30 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

AB Title compds. [I; R1, R2 = H, (substituted) alkyl, cycloalkyl, heterocyclyl, R4Y(C:Z); R4 = (substituted) amino, heterocyclyl; Y = null, alkyl; Z = O, S, imino; R1R2N = heterocyclyl; R3 = heterocyclyl, (substituted) aryl; G = alkylene, CO, alkylenecarbonyl; Q = NH, CO; X = null, alkylene; with provisos], were prepared Thus, (3-chloro-4-fluorophenyl)-[6-[4-(4-ethylpiperazin-1-ylmethyl)phenyl]-7H-pyrrolo[2,3-d]pyrimidin-4-yl]amine (preparation outlined) inhibited the tyrosine kinase activity of HER-1, HER-2, and KDR with IC50 = 0.0031 μM, 0.008 μM, and 0.0107 μM, resp.
IT 497841-34-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pyrrolopyrimidines as protein tyrosine kinase inhibitors)
RN 497841-34-6 CAPLUS
CN Benzonitrile, 4-(4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-6-yl)- (CA INDEX NAME)



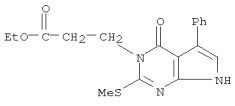
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 31 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:459007 CAPLUS
DOCUMENT NUMBER: 141:64410
TITLE: Docking of indolo- and pyrrolo-pyrimidines to DNA. New DNA-interactive polycycles from amino-indoles/pyrroles and BMMA
AUTHOR(S): Lauria, Antonino; Diana, Patrizia; Barraja, Paola; Montalbano, Alessandra; Dattolo, Gaetano; Cirrincione, Girolamo; Almerico, Anna Maria
CORPORATE SOURCE: Dip. Farmacochim., Tossicologico Biol., Univ. degli Studi di Palermo, Palermo, 90123, Italy
SOURCE: ARKIVOC (Gainesville, FL, United States) (2004), (5), 263-271
CODEN: AGFUAR
URL: http://www.arkat-usa.org/ark/journal/2004/Tortorella/VT-1079L/1079L.pdf
PUBLISHER: Arkat USA Inc.
DOCUMENT TYPE: Journal; (online computer file)
LANGUAGE: English
AB New indolo- and pyrrolo-pyrimidines of type 1-4 were studied for their ability to form stable complexes with DNA fragments. The calculated free energies of binding were found in the range -8.39 ÷ -16.72 Kcal/mol. The docking studies revealed a common binding mode with the chromophore intercalated between GC base pairs whereas the side chain lies along the minor groove.
IT 712312-77-1 712312-78-2 712312-79-3
712312-80-6 712312-81-7 712312-82-8
712312-83-9 712312-84-0 712312-85-1
712312-86-2 712312-87-3 712312-88-4
712312-89-5 712312-90-8 712312-91-9
712312-92-0 712312-93-1 712312-94-2
RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)
(docking of indolo- and pyrrolo-pyrimidines to DNA.)
RN 712312-77-1 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-acetic acid, 4,7-dihydro-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)

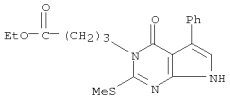


RN 712312-78-2 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-propanoic acid, 4,7-dihydro-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)

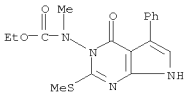
L4 ANSWER 31 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



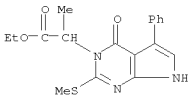
RN 712312-79-3 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-butanoic acid, 4,7-dihydro-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)



RN 712312-80-6 CAPLUS
CN Carbamic acid, [4,7-dihydro-2-(methylthio)-4-oxo-5-phenyl-3H-pyrrolo[2,3-d]pyrimidin-3-yl]methyl-, ethyl ester (9CI) (CA INDEX NAME)

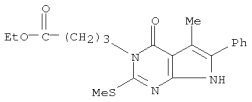


RN 712312-81-7 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-acetic acid, 4,7-dihydro-α-methyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)

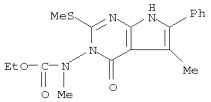


RN 712312-82-8 CAPLUS

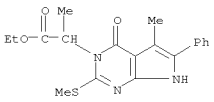
L4 ANSWER 31 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



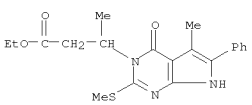
RN 712312-86-2 CAPLUS
CN Carbamic acid, [4,7-dihydro-5-methyl-2-(methylthio)-4-oxo-6-phenyl-3H-pyrrolo[2,3-d]pyrimidin-3-yl]methyl-, ethyl ester (9CI) (CA INDEX NAME)



RN 712312-87-3 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-acetic acid, 4,7-dihydro-α,5-dimethyl-2-(methylthio)-4-oxo-6-phenyl-, ethyl ester (CA INDEX NAME)



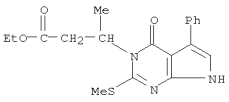
RN 712312-88-4 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-propanoic acid, 4,7-dihydro-β,5-dimethyl-2-(methylthio)-4-oxo-6-phenyl-, ethyl ester (CA INDEX NAME)



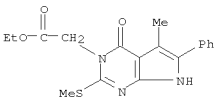
RN 712312-89-5 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-acetic acid, 4,7-dihydro-6-methyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)

L4 ANSWER 31 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

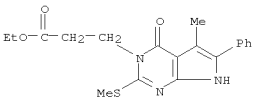
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-propanoic acid, 4,7-dihydro-β-methyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)



RN 712312-83-9 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-acetic acid, 4,7-dihydro-5-methyl-2-(methylthio)-4-oxo-6-phenyl-, ethyl ester (CA INDEX NAME)

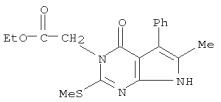


RN 712312-84-0 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-propanoic acid, 4,7-dihydro-5-methyl-2-(methylthio)-4-oxo-6-phenyl-, ethyl ester (CA INDEX NAME)

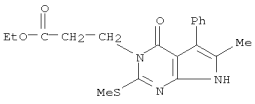


RN 712312-85-1 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-butanoic acid, 4,7-dihydro-5-methyl-2-(methylthio)-4-oxo-6-phenyl-, ethyl ester (CA INDEX NAME)

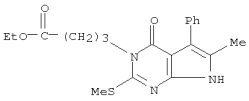
L4 ANSWER 31 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



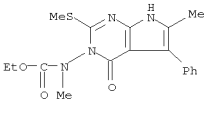
RN 712312-90-8 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-propanoic acid, 4,7-dihydro-6-methyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)



RN 712312-91-9 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-butanoic acid, 4,7-dihydro-6-methyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester (CA INDEX NAME)

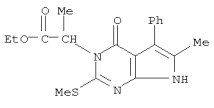


RN 712312-92-0 CAPLUS
CN Carbamic acid, [4,7-dihydro-6-methyl-2-(methylthio)-4-oxo-5-phenyl-3H-pyrrolo[2,3-d]pyrimidin-3-yl]methyl-, ethyl ester (9CI) (CA INDEX NAME)

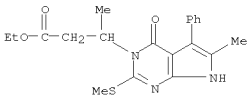


RN 712312-93-1 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-acetic acid, 4,7-dihydro-α,6-dimethyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester

L4 ANSWER 31 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(CA INDEX NAME)

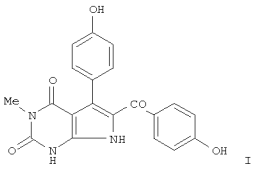


RN 712312-94-2 CAPLUS
CN 3H-Pyrrolo[2,3-d]pyrimidine-3-propanoic acid,
4,7-dihydro-β,6-dimethyl-2-(methylthio)-4-oxo-5-phenyl-, ethyl ester
(CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

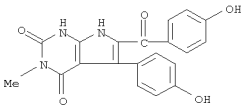
L4 ANSWER 32 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:273225 CAPLUS
DOCUMENT NUMBER: 141:120450
TITLE: Rigidin E, a new pyrrolopyrimidine alkaloid from a Papua New Guinea tunicate Eudistoma species
AUTHOR(S): Davis, Rohan A.; Christensen, Lane V.; Richardson, Adam D.; Moreira da Rocha, Rosana; Ireland, Chris M.
CORPORATE SOURCE: Department of Medicinal Chemistry, University of Utah,
Salt Lake City, UT, 84112, USA
SOURCE: Marine Drugs (2003), 1(1), 27-33
CODEN: MDARE6; ISSN: 1660-3397
URL:
http://www.mdpi.net/marinedrugs/papers/papers03/m
d101027.pdf
PUBLISHER: MDPI Center
DOCUMENT TYPE: Journal; (online computer file)
LANGUAGE: English
GI



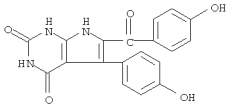
I

AB A new pyrrolo[2,3-d]pyrimidine alkaloid, rigidin E (I), and the known metabolites rigidin (II) and 1-methylherbipoline (III) were isolated from a Papua New Guinea tunicate Eudistoma sp. A combination of spectroscopic data were used to determine the structures of these metabolites.
Alkaloids I,
II and III showed only minimal cell growth inhibition when assayed for cytotoxicity against HCT 166 and A431 cancer cell lines.
IT 721960-13-0P, Rigidine E
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(isolation and antitumor activity of rigidin E, a new pyrrolo[2,3-d]pyrimidine alkaloid from a Papua New Guinea tunicate Eudistoma species)
RN 721960-13-0 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,
6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)-3-methyl- (CA INDEX NAME)

L4 ANSWER 32 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

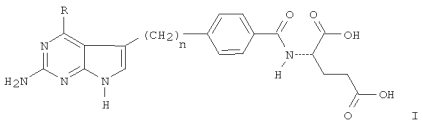


IT 132160-44-2P, Rigidin
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PUR (Purification or recovery); BIOL (Biological study); OCCU
(Occurrence); PREP (Preparation)
(isolation and antitumor activity of rigidin E, a new pyrrolo[2,3-d]pyrimidine alkaloid from a Papua New Guinea tunicate Eudistoma species)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,
6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)

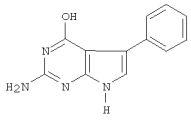


OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD
(9 CITINGS)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 33 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:921940 CAPLUS
DOCUMENT NUMBER: 140:59601
TITLE: A New and Efficient Synthesis of Pyrrolo[2,3-d]pyrimidine Anticancer Agents: Alimta (LY231514, MTA), Homo-Alimta, TNP-351, and Some Aryl 5-Substituted Pyrrolo[2,3-d]pyrimidines
AUTHOR(S): Taylor, Edward C.; Liu, Bin
CORPORATE SOURCE: Department of Chemistry, Princeton University, Princeton, NJ, 08544, USA
SOURCE: Journal of Organic Chemistry (2003), 68(26), 9938-9947
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:59601
GI



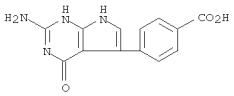
I



II

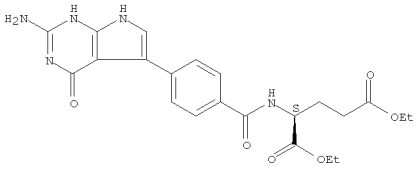
AB Alimta (I; R = OH, n = 2), as well as homo-Alimta (I; R = OH, n = 3), a non-bridged analog of Alimta I (R = OH, n = 0), and TNP-351 (I; R = NH2, n
= 3) have been prepared by a new method that involves Michael addition of the
appropriate 1-nitroalkene with 2,6-diamino-3H-pyrimidin-4-one or 2,4,6-triaminopyrimidine, followed by a Nef reaction of the resulting primary nitro Michael adduct. Spontaneous intramol. cyclization of the resulting aldehyde with the pyrimidine 6-amino group yields the corresponding pyrrolo[2,3-d]pyrimidine. A series of previously unknown 5-arylpyrrolo[2,3-d]pyrimidines, e.g. II, was prepared by the same methodol.
from the above pyrimidines and nitrostyrenes. It has been found that the intermediate primary nitro Michael adduct can be prepared in a single step
by sonication of a mixture of an arylaldehyde, nitromethane, and the 6-aminopyrimidine in acetic acid containing ammonium acetate.
IT 637780-42-8P 637780-43-9P

L4 ANSWER 33 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(new and efficient synthesis of pyrrolo[2,3-d]pyrimidine anticancer agents and aryl 5-substituted pyrrolo[2,3-d]pyrimidines)
RN 637780-42-8 CAPLUS
CN Benzoic acid, 4-(2-amino-4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-5-yl)- (CA INDEX NAME)



RN 637780-43-9 CAPLUS
CN L-Glutamic acid, N-[4-(2-amino-4,7-dihydro-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-5-yl)benzoyl]-, diethyl ester (9CI) (CA INDEX NAME)

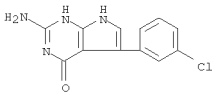
Absolute stereochemistry.



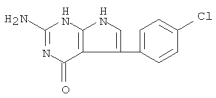
IT 229471-25-4P 259145-28-3P 637780-52-0P
637780-54-2P 637780-56-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(new and efficient synthesis of pyrrolo[2,3-d]pyrimidine anticancer agents and aryl 5-substituted pyrrolo[2,3-d]pyrimidines)
RN 229471-25-4 CAPLUS
CN L-Glutamic acid, N-[4-(2-amino-4,7-dihydro-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-5-yl)benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 33 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

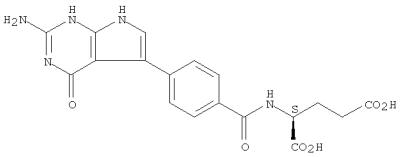


RN 637780-56-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-5-(4-chlorophenyl)-3,7-dihydro- (CA INDEX NAME)

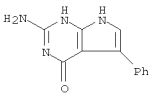


OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

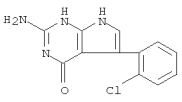
L4 ANSWER 33 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 259145-28-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-5-phenyl- (CA INDEX NAME)



RN 637780-52-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-5-(2-chlorophenyl)-3,7-dihydro- (CA INDEX NAME)



RN 637780-54-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-5-(3-chlorophenyl)-3,7-dihydro- (CA INDEX NAME)

L4 ANSWER 34 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

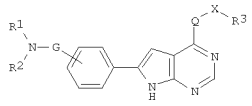
ACCESSION NUMBER: 2003:133054 CAPLUS
DOCUMENT NUMBER: 138:170253
TITLE: Preparation of 4-amino-6-phenyl-pyrrolo[2,3-d]pyrimidines as protein tyrosine kinase inhibitors
INVENTOR(S): Bold, Guido; Capraro, Hans-Georg; Caravatti, Giorgio; Traxler, Peter
PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma G.m.b.H.
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003013541	A1	20030220	WO 2002-EP8780	20020806
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
CA 2453881	A1	20030220	CA 2002-2453881	20020806
AU 2002324029	A1	20030224	AU 2002-324029	20020806
AU 2002324029	B2	20050127		
EP 1416935	A1	20040512	EP 2002-758437	20020806
EP 1416935	B1	20080312		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002011801	A	20040831	BR 2002-11801	20020806
HU 2004001083	A2	20040928	HU 2004-1083	20020806
HU 2004001083	A3	20071228		
CN 1538847	A	20041020	CN 2002-815351	20020806
JP 2005501077	T	20050113	JP 2003-518550	20020806
JP 4147184	B2	20080910		
NZ 530824	A	20050826	NZ 2002-530824	20020806
RU 2318826	C2	20080310	RU 2004-106783	20020806
AT 388713	T	20080315	AT 2002-758437	20020806
PT 1416935	E	20080618	PT 2002-758437	20020806
ES 2302830	T3	20080801	ES 2002-758437	20020806
CN 101560214	A	20091021	CN 2009-10137877	20020806
SG 156521	A1	20091126	SG 2006-778	20020806
ZA 2004000271	A	20041101	ZA 2004-271	20040114
US 20040242600	A1	20041202	US 2004-485747	20040203
US 7244729	B2	20070717		
NO 2004000540	A	20040205	NO 2004-540	20040205
MX 2004001191	A	20050217	MX 2004-1191	20040206
IN 2004CN00238	A	20051209	IN 2004-CN238	20040206
US 20040248911	A1	20041209	US 2004-783000	20040220
US 7323469	B2	20080129		
HK 1065483	A1	20080822	HK 2004-108357	20041025
US 20070161632	A1	20070712	US 2007-686023	20070314
US 7390805	B2	20080624		
PRIORITY APPLN. INFO.:			GB 2001-19249 A	20010807

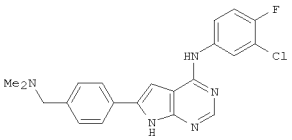
L4 ANSWER 34 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

	CN 2002-815351	A3 20020806
	WO 2002-EP8780	W 20020806
	US 2004-485747	A2 20040203

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 138:170253
GI



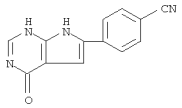
I



II

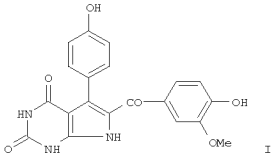
AB The title compds. I [R1, R2 = H, alkyl, cycloalkyl, etc.; or NR1R2 = heterocyclyl; R3 = heterocyclyl, (un)substituted aryl; G = alkylene, CO, alkyleneCO wherein the carbonyl group is attached to the NR1R2; Q = NH, O, with the proviso that Q = O if G = CO or alkyleneCO; X is either not present or alkylene, with the proviso that a heterocyclic radical R3 is bonded via a ring carbon if X is not present] and their salts, useful for treatment of a disease which responds to an inhibition of a protein tyrosine kinase, especially for the treatment of a proliferative disease, such as a tumor, were prepared and formulated. E.g., a 4-step synthesis of II, starting from Et 4-(4-chloro-7H-pyrrolo[2,3-d]pyrimidin-6-yl)benzoate and 3-chloro-4-fluoroaniline, was given. Compds. I were tested for their inhibition of the tyrosine kinase activity of EGF-R (HER-1), ErbB-2 (HER-2) and VEGF receptor (KDR) (data given for 21 exemplified compds.).
IT 497841-34-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

L4 ANSWER 34 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(prepn. of 4-amino-6-phenyl-pyrrolo[2,3-d]pyrimidines as protein tyrosine kinase inhibitors)
RN 497841-34-6 CAPLUS
CN Benzonitrile, 4-(4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-6-yl)- (CA INDEX NAME)



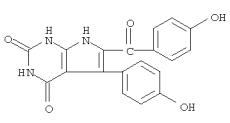
OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 35 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:13467 CAPLUS
DOCUMENT NUMBER: 138:184210
TITLE: Rigidins B-D, new pyrrolopyrimidine alkaloids from a tunicate Cystodytes species
AUTHOR(S): Tsuda, Masashi; Nozawa, Kohei; Shimbo, Kazutaka; Kobayashi, Jun'ichi
CORPORATE SOURCE: Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo, 060-0812, Japan
SOURCE: Journal of Natural Products (2003), 66(2), 292-294
CODEN: JNPRDF; ISSN: 0163-3864
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



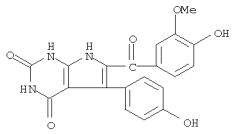
I

AB Three new pyrrolopyrimidine alkaloids, rigidins B-D (e.g. I, rigidin B), have been isolated from an Okinawan marine tunicate Cystodytes sp., and the structures were elucidated on the basis of spectroscopic data.
IT 132160-44-2, Rigidin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(pyrrolopyrimidine alkaloids from tunicate Cystodytes species)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)

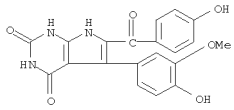


IT 499104-90-4P, Rigidine B 499104-91-5P, Rigidine C
499104-92-6P, Rigidine D
RL: NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(pyrrolopyrimidine alkaloids from tunicate Cystodytes species)
RN 499104-90-4 CAPLUS

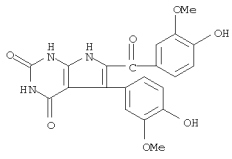
L4 ANSWER 35 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxy-3-methoxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)



RN 499104-91-5 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoyl)-5-(4-hydroxy-3-methoxyphenyl)- (CA INDEX NAME)



RN 499104-92-6 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxy-3-methoxybenzoyl)-5-(4-hydroxy-3-methoxyphenyl)- (CA INDEX NAME)

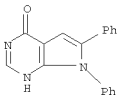


OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 36 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:455610 CAPLUS
DOCUMENT NUMBER: 137:310888
TITLE: Synthesis of some new pyrrolo[2,3-d] pyrimidine-4-amines
AUTHOR(S): Hilmy, Khalid Mohamed Hassan
CORPORATE SOURCE: Chemistry Department, Faculty of Science, Minoufiya University, Shebin El-kom, Egypt
SOURCE: Afinidad (2002), 59(498), 147-150
CODEN: AFINAE; ISSN: 0001-9704
PUBLISHER: Asociacion de Quimicos del Instituto Quimico de Sarria
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:310888
GI

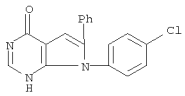
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The reaction of 2-aminopyrrole-3-carbonitriles I (R1 = H, Cl, Me, R2 = H) with formic acid gave pyrrolo[2,3-d]pyrimidin-4(3H)-ones which afforded 4-chloropyrrolo[2,3-d]pyrimidines on reaction with phosphorus oxychloride. The latter afforded pyrrolo[2,3-d]pyrimidine-4-amines II (R1 = H, Cl, R2 = H; R1 = Me, R2 = Cl) by treatment with aromatic amines. On the other hand, treatment of compds. I (R1 = Cl, R2 = H; R1 = H, R2 = CF3) with formic acid in the presence of formamide and N,N-dimethylformamide afforded 4-aminopyrrolo[2,3-d]pyrimidines III.
IT 473289-23-5P 473289-24-6P 473289-25-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pyrrolopyrimidineamines via reaction of amino(cyano)pyrroles with formic acid and subsequent cyclization, chlorination, and substitution with aromatic amines)
RN 473289-23-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6,7-diphenyl- (CA INDEX NAME)

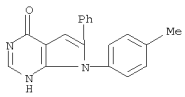


RN 473289-24-6 CAPLUS

L4 ANSWER 36 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-chlorophenyl)-3,7-dihydro-6-phenyl- (CA INDEX NAME)



RN 473289-25-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-methylphenyl)-6-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 37 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:314913 CAPLUS
DOCUMENT NUMBER: 136:340689
TITLE: Preparation of urea derivatives containing nitrogenous aromatic ring compounds as inhibitors of angiogenesis
INVENTOR(S): Funahashi, Yasuhiro; Tsuruoka, Akihiko; Matsukura, Masayuki; Haneda, Toru; Fukuda, Yoshio; Kamata, Junichi; Takahashi, Keiko; Matsushima, Tomohiro; Miyazaki, Kazuki; Nomoto, Kenichi; Watanabe, Tatsuo; Obaishi, Hiroshi; Yamaguchi, Atsumi; Suzuki, Sachi; Nakamura, Katsuji; Mimura, Fusayo; Yamamoto, Yuji; Matsui, Junji; Matsui, Kenji; Yoshiba, Takako; Suzuki, Yasuyuki; Arimoto, Itaru
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: PCT Int. Appl., 699 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

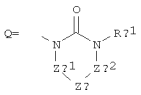
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002032872	A1	20020425	WO 2001-JP9221	20011019
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2426461	A1	20020425	CA 2001-2426461	20011019
AU 2001095986	A	20020429	AU 2001-95986	20011019
HU 2003002603	A2	20031128	HU 2003-2603	20011019
HU 2003002603	A3	20100329		
CN 1478078	A	20040225	CN 2001-819710	20011019
CN 1308310	C	20070404		
EP 1415987	A1	20040506	EP 2001-976786	20011019
EP 1415987	B1	20070228		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
EP 1506962	A2	20050216	EP 2004-25700	20011019
EP 1506962	A3	20050302		
EP 1506962	B1	20080702		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
NZ 525324	A	20050324	NZ 2001-525324	20011019
JP 3712393	B2	20051102	JP 2002-536056	20011019
RU 2264389	C2	20051120	RU 2003-114740	20011019
AT 355275	T	20060315	AT 2001-976786	20011019
AU 2001295986	B2	20060817	AU 2001-295986	20011019
EP 1777218	A1	20070425	EP 2006-23078	20011019
EP 1777218	B1	20081231		
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR				

L4 ANSWER 37 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

PT 1415987	E	20070531	PT 2001-976786	20011019
CN 101024627	A	20070829	CN 2007-10007096	20011019
CN 101029022	A	20070905	CN 2007-10007097	20011019
ES 2282299	T3	20071016	ES 2001-976786	20011019
IL 155447	A	20080605	IL 2001-155447	20011019
AT 399766	T	20080715	AT 2004-25700	20011019
TW 304061	B	20081211	TW 2001-90125928	20011019
AT 419239	T	20090115	AT 2006-23078	20011019
ES 2318649	T3	20090501	ES 2006-23078	20011019
NO 2003001731	A	20030619	NO 2003-1731	20030414
MX 2003003362	A	20030801	MX 2003-3362	20030415
US 7253286	B2	20070807	US 2003-420466	20030418
US 20040053908	A1	20040318		
ZA 2003003567	A	20040810	ZA 2003-3567	20030508
JP 2005272474	A	20051006	JP 2005-124034	20050421
JP 4354929	B2	20091028		
US 20060247259	A1	20061102	US 2005-293785	20051202
US 7612092	B2	20091103		
US 20060160832	A1	20060720	US 2006-347749	20060203
AU 2006203099	A1	20060810	AU 2006-203099	20060719
AU 2006236039	A1	20061207	AU 2006-236039	20061116
AU 2006236039	B2	20080522		
NO 2007004657	A	20030619	NO 2007-4657	20070912
JP 2009215313	A	20090924	JP 2009-123432	20090521
PRIORITY APPLN. INFO.:			JP 2000-320420	A 20001020
			JP 2000-386195	A 20001220
			JP 2001-46685	A 20010222
			AU 2001-295986	A3 20011019
			AU 2001-95986	TO 20011019
			CN 2001-819710	A3 20011019
			EP 2001-976786	A3 20011019
			JP 2002-536056	A3 20011019
			WO 2001-JP9221	W 20011019
			US 2003-420466	A3 20030418
			JP 2005-124034	A3 20050421
			US 2005-293785	A1 20051202

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 136:340689
GI

L4 ANSWER 37 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

Q= 

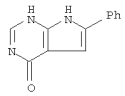
AB N-aryl or N-heteroarylurea derivs. represented by the general formula Ag-Xg-Yg-Tg1 or salts thereof, or hydrates of both [wherein Ag = (un)substituted C6-14 aryl or 5- to 14-membered heterocyclic group; Xg = single bond, O, S, C1-6 alkylene, SO, SO2, (un)substituted NH; Yg = (un)substituted C6-14 aryl, 5- to 14-membered heterocyclic group, C1-8 alkyl, C3-8 alicyclic hydrocarbyl, C6-14 aryl-C1-6 alkyl, 5- to 14-membered heteroaryl-C1-6 alkyl, (CH2)gSO2 (g = 1-8), (CH2)faCH:CH(CH2)fb (fa, fb = 0, 1,2,3), etc.; and Tg1 = a group of the general formula -Eg-CO-NRg1(Zg) or Q; wherein Eg = a single bond, (un)substituted NH; Rg1 = H, (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C3-8 aliphatic hydrocarbyl, etc.; Zg = C1-8 alkyl, C3-8 alicyclic hydrocarbyl, C6-14 aryl, etc.; Zg1, Zg2 = (a) a single bond, (b) C1-6 alkylene optionally having ≥1 atoms selected from O, S, and N in the middle or the terminus of the chain and optionally substituted with oxo, (c) (un)substituted C2-6 alkenyl] are prepared These compds. are also inhibitors of vascular endothelial growth factor receptor kinase (VEGFR2 kinase) and are useful as antitumor agents against hemangioma, pancreatic cancer, stomach cancer, colon cancer, breast cancer, prostate cancer, lung cancer, brain tumor, leukemia, or ovarian cancer, as cancer metastasis inhibitors, and for the treatment of retina neovascularization, diabetic retinopathy, atherosclerosis, or inflammatory diseases such as osteoarthritis, rheumatoid arthritis, psoriasis, or delayed hypersensitivity. Thus, to solution of 334 mg 4-[6-(4-benzyloxyphenyl)-7-(2-trimethylsilylethoxymethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-2-chlorophenylamine in 4 mL DMF were added 0.066 mL pyridine and 0.102 mL Ph chlorocarbonate and stirred at room temperature for 2.5 h to give 330 mg N-[4-[6-(4-benzyloxyphenyl)-7-(2-trimethylsilylethoxymethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-2-chlorophenyl]-N'-cyclopropylurea which (260 mg) was hydrogenolyzed over platinum oxide in ethanol overnight to give 160 mg N-[4-[6-(4-hydroxyphenyl)-7-(2-trimethylsilylethoxymethyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-2-chlorophenyl]-N'-cyclopropylurea (I). I showed IC50 of 0.02 nM for inhibiting the vascular endothelial growth factor (VEGF)-stimulated sandwich tube formation in vascular endothelial cell.

IT 173458-99-6, 6-Phenyl-7H-pyrrolo[2,3-d]pyrimidin-4-ol
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of urea derivs. containing nitrogenous aromatic ring compds. as

L4 ANSWER 37 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

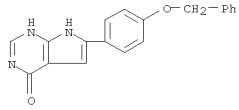
L4 ANSWER 37 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
angiogenesis inhibitors for prevention or treatment of diseases)

RN 173458-99-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl- (CA INDEX NAME)

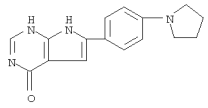


IT 417721-40-5P 417723-61-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of urea derivs. containing nitrogenous aromatic ring compds. as angiogenesis inhibitors for prevention or treatment of diseases)

RN 417721-40-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-[4-(phenylmethoxy)phenyl]- (CA INDEX NAME)



RN 417723-61-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-[4-(1-pyrrolidinyl)phenyl]- (CA INDEX NAME)



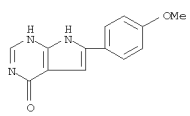
OS.CITING REF COUNT: 44 THERE ARE 44 CAPLUS RECORDS THAT CITE THIS RECORD (117 CITINGS)
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS

L4 ANSWER 38 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:132148 CAPLUS
DOCUMENT NUMBER: 136:318825
TITLE: Pyrrolo[2,3-d]pyrimidine and pyrazolo[3,4-d]pyrimidine derivatives as selective inhibitors of the EGF receptor tyrosine kinase
AUTHOR(S): Caravatti, G.; Bruggen, J.; Buchdunger, E.; Cozens, R.; Furet, P.; Lydon, N.; O'Reilly, T.; Traxler, P.
CORPORATE SOURCE: TA Oncology, Novartis Pharma AG, Basel, CH-4002, Switz.
SOURCE: ACS Symposium Series (2001), 796(Anticancer Agents), 231-244
CODEN: ACSMC8; ISSN: 0097-6156
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:318825

AB The EFG receptor tyrosine kinase (EGFR) is an attractive target for the development of agents directed against tumors which either overexpress the EGFR or which have a mutated or amplified gene encoding the EGFR. Several ATP-competitive inhibitors of this kinase have shown promising in vitro and in vivo efficacy and are currently in different stages of clin. development. One of them is PKI166, a pyrrolo[2,3-d]pyrimidine, which has been selected from a large series of pyrrolo[2,3-d]pyrimidines and structurally related pyrazolo[3,4-d]pyrimidines. The discovery and preclin. data of PKI166 are summarized.

IT 173458-97-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(pyrrolo[2,3-d]pyrimidine and pyrazolo[3,4-d]pyrimidine derivs. as selective inhibitors of the EGF receptor tyrosine kinase)

RN 173458-97-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)- (CA INDEX NAME)

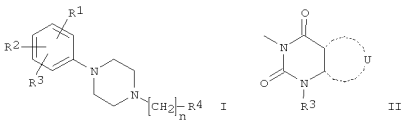


OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

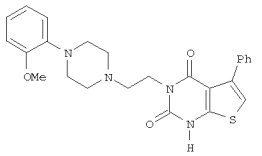
L4 ANSWER 39 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:909212 CAPLUS
DOCUMENT NUMBER: 134:56691
TITLE: Preparation of piperazinyl thienopyrimidine diones as selective α-1D adrenoceptor antagonists
INVENTOR(S): Meyer, Michael D.; Caroll, William A.
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: U.S., 16 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6166019	A	20001226	US 1999-351090	19990709
PRIORITY APPLN. INFO.:			US 1998-92988P P	19980716

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 134:56691
GI

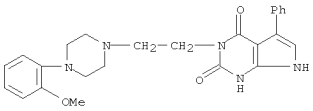

I

II

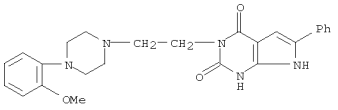

III

AB The title compds. [I; R1-R3 = halo, OH, NO2, etc.; n = 2-10; R4 = II (wherein U, taken together with the carbon atoms to which it is attached forms thieno ring, etc.)] and their pharmaceutically acceptable salts,

L4 ANSWER 39 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
which are selective alpha-1D adrenoceptor antagonists and may be useful for treating disease states such as hypertension, were prepd. E.g., a 3-step synthesis of III as methanesulfonate salt which showed Ki of 0.213 nM against α-1D binding, was given.
IT 255713-58-7 255713-59-8
RL: PRPH (Prophetic)
(Preparation of piperazinyl thienopyrimidine diones as selective α-1D adrenoceptor antagonists)
RN 255713-58-7 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-5-phenyl- (CA INDEX NAME)

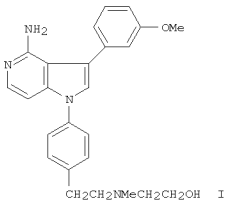


RN 255713-59-8 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-6-phenyl- (CA INDEX NAME)



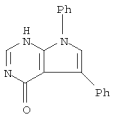
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 40 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:380074 CAPLUS
DOCUMENT NUMBER: 133:150514
TITLE: Substituted 5,7-diphenylpyrrolo[2,3-d]pyrimidines: potent inhibitors of the tyrosine kinase c-Src
AUTHOR(S): Missbach, Martin; Altmann, Eva; Widler, Leo; Susa, Mira; Buchdunger, Elisabeth; Mett, Helmut; Meyer, Thomas; Green, Jonathan
CORPORATE SOURCE: Novartis Pharma AG, Therapeutic Areas Arthritis and Bone Metabolism, Basel, CH-4002, Switz.
SOURCE: Bioorganic & Medicinal Chemistry Letters (2000), 10(9), 945-949
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI


I

AB 5,7-Diphenylpyrrolo[2,3-d]pyrimidines, e.g., I, represent a new class of highly potent inhibitors of the tyrosine kinase c-Src (IC50 <50 nM) with specificity against a panel of different tyrosine kinases. The substitution pattern on the two Ph rings dets. potency and specificity and provides a means to modulate cellular activity.
IT 287177-12-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(5,7-diphenylpyrrolo[2,3-d]pyrimidines as inhibitors of the tyrosine kinase c-Src)
RN 287177-12-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,7-diphenyl- (CA INDEX NAME)

L4 ANSWER 40 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 41 THERE ARE 41 CAPLUS RECORDS THAT CITE THIS RECORD (42 CITINGS)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

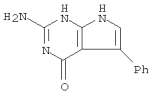
L4 ANSWER 41 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:144884 CAPLUS
DOCUMENT NUMBER: 132:166253
TITLE: Process for the preparation of pyrrolo[2,3-d]pyrimidines
INVENTOR(S): Taylor, Edward C.; Liu, Bin
PATENT ASSIGNEE(S): The Trustees of Princeton University, USA
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000011004	A1	20000302	WO 1999-US18802	19990819
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6066732	A	20000523	US 1998-138354	19980821
CA 2338945	A1	20000302	CA 1999-2338945	19990819
AU 9954916	A	20000314	AU 1999-54916	19990819
EP 1105396	A1	20010613	EP 1999-941223	19990819
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002523417	T	20020730	JP 2000-566277	19990819

PRIORITY APPLN. INFO.: US 1998-138354 A 19980821
WO 1999-US18802 W 19990819

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 132:166253; MARPAT 132:166253
AB 4(3H)-X-7H-Pyrrolo[2,3-d]pyrimidines in which X is O or NH are prepared by
(i) treating a 6-amino-4(3H)-X-pyrimidine with an (un)substituted 1-nitroalk-1-ene to yield a 6-amino-4(3H)-X-pyrimidine which is substituted in the 5-position by a 1-nitroalk-2-yl group, (ii) converting the 5-(1-nitroalk-2-yl)-6-amino-4(3H)-X-pyrimidine to the corresponding 5-(1-oxoalk-2-yl)-6-amino-4(3H)-X-pyrimidine, and (iii) cyclodehydration. Thus, treating 2,6-diamino-4(3H)-pyrimidone with 1-nitro-4-(4-ethoxycarbonylphenyl)-1-butene gives 1-nitro-2-(2,6-diamino-4(3H)-oxopyrimidin-5-yl)-4-(4-ethoxycarbonylphenyl)butane, which is then treated sequentially with base and acid, without isolation of the intermediate aldehyde, to form 4-[2-(2-amino-4(3H)-oxo-7H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]benzoic acid, a valuable known chemical intermediate for the preparation of N-[4-[2-(2-hydroxy-4-amino-7H-pyrrolo[2,3-d]-pyrimidin-5-yl)ethyl]benzoyl]glutamic acid.
IT 259145-28-3P

L4 ANSWER 41 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of pyrrolo[2,3-d]pyrimidines)
RN 259145-28-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-5-phenyl- (CA INDEX NAME)



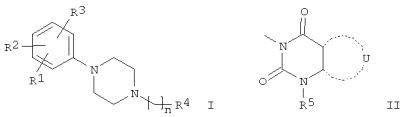
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 42 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:68462 CAPLUS
DOCUMENT NUMBER: 132:107962
TITLE: Preparation of piperazinylalkyl pyrimidinedione compounds selective for adrenoceptors
INVENTOR(S): Meyer, Michael D.; Carroll, William A.
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

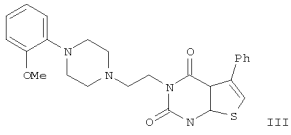
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000004027	A1	20000127	WO 1999-US15732	19990712
W: CA, JP, MX				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6153614	A	20001128	US 1998-116376	19980716
CA 2336950	A1	20000127	CA 1999-2336950	19990712
EP 1095044	A1	20010502	EP 1999-933919	19990712
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002520417	T	20020709	JP 2000-560133	19990712
MX 2001000487	A	20010622	MX 2001-487	20010115

PRIORITY APPLN. INFO.: US 1998-116376 A 19980716
WO 1999-US15732 W 19990712

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 132:107962
GI



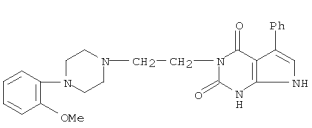
I II



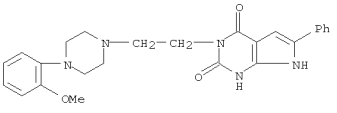
III

L4 ANSWER 42 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

AB The title compds. [I; R1-R3 = halo, OH, NO2, etc.; R4 = II (wherein U taken together with the carbon atoms to which it is attached, forms a mono- or disubstituted 5-membered heterocycle having 4 carbon atoms, 2 double bonds, and one heteroatom selected from O, S, NH, N(alkyl), a mono or disubstituted 6-membered heterocycle containing 3 double bonds and either 1, 2 or 3 N atoms, etc.; R5 = H, alkyl, alkenyl, etc.); n = 2-10] and their pharmaceutically acceptable salts, which are selective α-1D adrenoceptor antagonists and may be useful for treating disease states such as benign prostatic hyperplasia, hypertension, detrusor instability and incontinence, were prepared E.g., a 3-step synthesis of III.MeSO3H which showed Ki of 0.213 nM against α1D binding (rat), was given.
IT 255713-58-7P 255713-59-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperazinylalkyl pyrimidinedione compds. selective for adrenoceptors)
RN 255713-58-7 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-5-phenyl- (CA INDEX NAME)



RN 255713-59-8 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-6-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 42 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

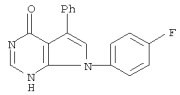
L4 ANSWER 43 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:457818 CAPLUS
DOCUMENT NUMBER: 131:214251
TITLE: Synthesis and reactions of fluoroaryl substituted 2-amino-3-cyanopyrroles and pyrrolo[2,3-d]pyrimidines
AUTHOR(S): Dave, Chaitanya G.; Desai, Nirmal D.
CORPORATE SOURCE: Organic Syntheses Laboratory, M. G. Science Institute, Ahmedabad, 380 009, India
SOURCE: Journal of Heterocyclic Chemistry (1999), 36(3), 729-733
CODEN: JHTCAD; ISSN: 0022-152X
PUBLISHER: HeteroCorporation
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Some fluoroaryl substituted 2-amino-3-cyanopyrroles were synthesized from the reaction between (2-bromo-1-arylalkylidene)propanedinitriles and fluoroaryl substituted aromatic amines under Gewald reaction condition, which on reaction with formamide and formic acid gave 4-aminopyrrolo[2,3-d]pyrimidines and pyrrolo[2,3-d]-pyrimidin-4(3H)-ones (4), resp. 4-Chloropyrrolo[2,3-d]pyrimidines were prepared by chlorination of 4 with P oxychloride, which on hydrazinolysis provided 4-hydrazinopyrrolo[2,3-d]pyrimidines.

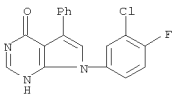
IT 243665-93-2P 243665-94-3P 243665-95-4P
243665-96-5P 243665-97-6P 243665-98-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and reactions of fluoroaryl substituted aminocyanopyrroles and pyrrolo[2,3-d]pyrimidines)

RN 243665-93-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

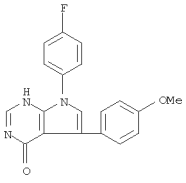


RN 243665-94-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3-chloro-4-fluorophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

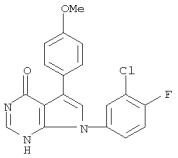
L4 ANSWER 43 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 243665-95-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-fluorophenyl)-3,7-dihydro-5-(4-methoxyphenyl)- (CA INDEX NAME)

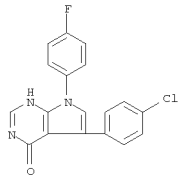


RN 243665-96-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3-chloro-4-fluorophenyl)-3,7-dihydro-5-(4-methoxyphenyl)- (CA INDEX NAME)

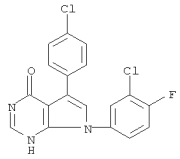


RN 243665-97-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-chlorophenyl)-7-(4-fluorophenyl)-3,7-dihydro- (CA INDEX NAME)

L4 ANSWER 43 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

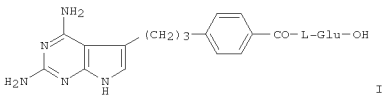


RN 243665-98-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(3-chloro-4-fluorophenyl)-5-(4-chlorophenyl)-3,7-dihydro- (CA INDEX NAME)

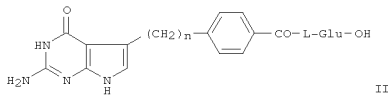


OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 44 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1999:321263 CAPLUS
DOCUMENT NUMBER: 131:88150
TITLE: Exploitation of a new route to fused pyrroles: synthesis of TNP-351, homo-MTA and 5-arylpyrrolo[2,3-d]pyrimidines
AUTHOR(S): Taylor, Edward C.; Liu, Bin
CORPORATE SOURCE: Department of Chemistry, Princeton University, Princeton, NJ, 08544, USA
SOURCE: Tetrahedron Letters (1999), 40(21), 4027-4030
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

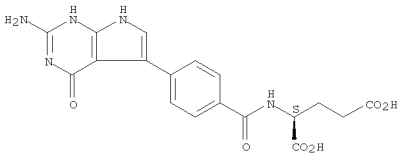


II

AB The authors have developed a new methodol. for the construction of pyrrolo[2,3-d]pyrimidines that involves Michael addition of 2,6-diamino-4(3H)-pyrimidinone or 2,4,6-triaminopyrimidines to nitroolefins, followed by a Nef reaction of the resulting adduct to form an intermediate aldehyde that spontaneously cyclizes to the fused pyrrole ring. This methodol. has been used in a new synthesis of TNP-351 (I), and for the first reported preparation of homo-LY231514, (homo-MTA; II; n = 3), and 5-arylpyrrolo[2,3-d]pyrimidine II (n = 0).
IT 229471-25-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(syntheses of TNP-351, homo-MTA and 5-arylpyrrolo[2,3-d]pyrimidines)
RN 229471-25-4 CAPLUS
CN L-Glutamic acid, N-[4-(2-amino-4,7-dihydro-4-oxo-1H-pyrrolo[2,3-d]pyrimidin-5-yl)benzoyl]- (9CI) (CA INDEX NAME)

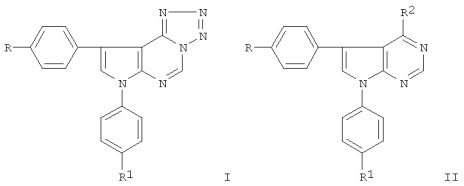
Absolute stereochemistry.

L4 ANSWER 44 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 45 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1999:51036 CAPLUS
DOCUMENT NUMBER: 130:196617
TITLE: Synthesis of 7H-Tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines and their reductive ring cleavage to 4-aminopyrrolo[2,3-d]pyrimidines
AUTHOR(S): Dave, Chaitanya G.; Shah, Rina D.
CORPORATE SOURCE: Organic Syntheses Laboratory, M. G. Science Institute,
Ahmedabad, 300 009, India
SOURCE: Journal of Heterocyclic Chemistry (1998), 35(6), 1295-1300
CODEN: JHTCAD; ISSN: 0022-152X
PUBLISHER: HeteroCorporation
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 130:196617
GI

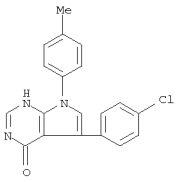


I

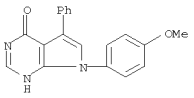
II

AB Some new 7,9-disubstituted 7H-tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines (I; R = H, MeO, Cl; R1 = MeO, Br, I, Me) have been synthesized either by diazotization of 4-hydrazino-7H-pyrrolo[2,3-d]pyrimidines (II; same R, R1; R2 = NHNH2), obtained by hydrazinolysis of II (R2 = Cl) or via a substitution reaction between II (R2 = Cl) and sodium azide. 5,7-Disubstituted 7H-pyrrolo[2,3-d]pyrimidin-4(3H)-ones were obtained by cyclocondensation of 1,4-disubstituted 2-amino-3-cyanopyrroles with formic acid; subsequent chlorination using phosphorus oxychloride afforded II (R2 = Cl). A novel route to II (R2 = NH2) via reductive ring cleavage of I has been reported.
IT 170464-79-6P 220835-17-6P 220835-18-7P
220835-19-8P 220835-20-1P 220835-21-2P
220835-22-3P 220835-23-4P 220835-24-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 7H-tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines and their reductive ring cleavage to 4-aminopyrrolo[2,3-d]pyrimidines)
RN 170464-79-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-chlorophenyl)-3,7-dihydro-7-(4-methylphenyl)- (CA INDEX NAME)

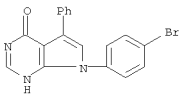
L4 ANSWER 45 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 220835-17-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-methoxyphenyl)-5-phenyl- (CA INDEX NAME)

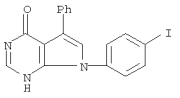


RN 220835-18-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-bromophenyl)-3,7-dihydro-5-phenyl- (CA INDEX NAME)

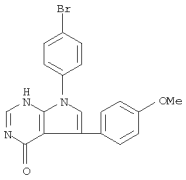


RN 220835-19-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-iodophenyl)-5-phenyl- (CA INDEX NAME)

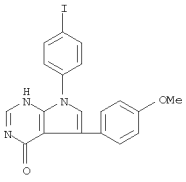
L4 ANSWER 45 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 220835-20-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-bromophenyl)-3,7-dihydro-5-(4-methoxyphenyl)- (CA INDEX NAME)

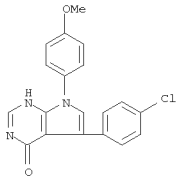


RN 220835-21-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(4-iodophenyl)-5-(4-methoxyphenyl)- (CA INDEX NAME)

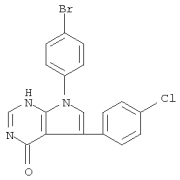


RN 220835-22-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-chlorophenyl)-3,7-dihydro-7-(4-methoxyphenyl)- (CA INDEX NAME)

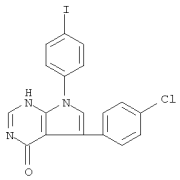
L4 ANSWER 45 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 220835-23-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(4-bromophenyl)-5-(4-chlorophenyl)-3,7-dihydro- (CA INDEX NAME)



RN 220835-24-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-chlorophenyl)-3,7-dihydro-7-(4-iodophenyl)- (CA INDEX NAME)



L4 ANSWER 45 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 46 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

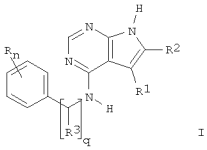
ACCESSION NUMBER: 1998:147332 CAPLUS
DOCUMENT NUMBER: 128:192664
ORIGINAL REFERENCE NO.: 128:38067a,38070a
TITLE: Preparation of substituted pyrrolopyrimidines as antitumor agents
INVENTOR(S): Traxler, Peter; Bold, Guido; Lang, Marc; Frei, Jorg
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Traxler, Peter; Bold, Guido; Lang, Marc; Frei, Jorg
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9807726	A1	19980226	WO 1997-EP4564	19970821
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CN 1194647	A	19980930	CN 1996-196640	19960624
CN 1100778	C	20030205		
CA 2262421	A1	19980226	CA 1997-2262421	19970821
CA 2262421	C	20071002		
AU 9742064	A	19980306	AU 1997-42064	19970821
AU 720429	B2	20000601		
EP 938486	A1	19990901	EP 1997-940108	19970821
EP 938486	B1	20080116		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000516626	T	20001212	JP 1998-510425	19970821
JP 4242928	B2	20090325		
AT 384062	T	20080215	AT 1997-940108	19970821
PT 938486	E	20080327	PT 1997-940108	19970821
ES 2297864	T3	20080501	ES 1997-940108	19970821
US 6180636	B1	20010130	US 1999-242592	19990219

PRIORITY APPLN. INFO.: CH 1996-2071 A 19960823
CH 1995-1976 A 19950706
WO 1997-EP4564 A 19970821

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 128:192664
GI

L4 ANSWER 46 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



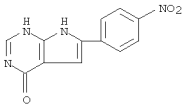
I

AB The title compds. [I; n = 0-3; q = 0-1; R = halo, lower alkyl, HOCH2, etc.; one of the radicals R1 and R2 = H, lower alkyl, and the other of the radicals R1 and R2 = (un)substituted Ph, amino-lower alkyl, piperidine-1-carbonyl, etc.], inhibitors of the tyrosine kinase activity of the receptor for the epidermal growth factor (EGF) and c-erbB2kinase and therefore useful as antitumor agents, were prepared and formulated. Thus, hydrogenation of 4-(3-chloroanilino)-6-formyl-7H-pyrrolo[2,3-d]pyrimidine (preparation described) with N-methylpiperazine in the presence of Raney Ni in DMPU, AcOH and MeOH afforded I [R = 3-Cl; R1 = H; R2 = 4-methylpiperazin-1-ylmethyl; q = 0]. Compds. I inhibit EGF-R-PTK activity by 50% (IC50), for example in a concentration of 0.0005-1 μM, especially from 0.001-1 μM. Compds. I are effective at 0.5-2 g/day when administered to a patient of a body weight of about 70 kg.

IT 187724-89-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of substituted pyrrolopyrimidines as antitumor agents)

RN 187724-89-6 CAPLUS

CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-nitrophenyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 47 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:525861 CAPLUS

DOCUMENT NUMBER: 127:190749

ORIGINAL REFERENCE NO.: 127:36997a,37000a

TITLE: Preparation of pyrrolopyrimidines as inhibitors of protein kinases

INVENTOR(S): Traxler, Peter; Frei, Jorg; Bold, Guido

PATENT ASSIGNEE(S): Novartis A.-G, Switz.; Traxler, Peter; Frei, Jorg; Bold, Guido

SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

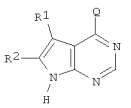
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9727199	A1	19970731	WO 1997-EP127	19970113
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2242354	A1	19970731	CA 1997-2242354	19970113
CA 2242354	C	20060725		
AU 9714414	A	19970820	AU 1997-14414	19970113
EP 888349	A1	19990107	EP 1997-901014	19970113
EP 888349	B1	20020522		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000503005	T	20000314	JP 1997-523897	19970113
JP 4275733	B2	20090610		
AT 217873	T	20020615	AT 1997-901014	19970113
PT 888349	E	20021031	PT 1997-901014	19970113
ES 2177925	T3	20021216	ES 1997-901014	19970113
US 6140317	A	20001031	US 1998-117056	19980722
PRIORITY APPLN. INFO.:			CH 1996-175 A	19960123
			WO 1997-EP127 W	19970113

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

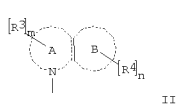
OTHER SOURCE(S): MARPAT 127:190749

GI

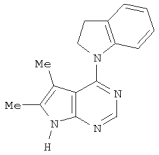
L4 ANSWER 47 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



I



II



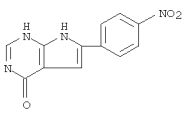
III

AB The title compds. [I; R1, R2 = lower alkyl, alkoxy, (un)substituted Ph, etc.; Q = heterocyclyl II bonded via a ring nitrogen atom (wherein m, n = 0-3; R3, R4 = lower alkyl, alkenyl, halo, etc.; A = 5-9 membered heterocyclyl; B = free or benzo-, thieno-, furo-, pyrrolo- or dihydropyrrolo-fused carbocyclic ring having from 5-9 carbon atoms)], inhibitors of protein kinases which are useful in the treatment of a tumor disease or psoriasis, were prepared and formulated. Thus, reaction of 4-chloro-5,6-dimethyl-7H-pyrrolo[2,3-d]pyrimidine with 2,3-dihydroindole in BuOH afforded the title compound III which showed IC50 of 1.56 μM against EGF-receptor-specific tyrosine kinase.

IT 187724-89-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pyrrolopyrimidines as inhibitors of protein kinases)

RN 187724-89-6 CAPLUS

CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-nitrophenyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

L4 ANSWER 47 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 48 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:204107 CAPLUS
DOCUMENT NUMBER: 126:199578
ORIGINAL REFERENCE NO.: 126:38583a,38586a
TITLE: Preparation of 7H-pyrrolo[2,3-d]pyrimidines as tyrosine protein kinase inhibitors
INVENTOR(S): Traxler, Peter; Bold, Guido; Brill, Wolfgang Karl-Diether; Frei, Joerg
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.; Traxler, Peter; Bold, Guido; Brill, Wolfgang, Karl-Diether; Frei, Joerg
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

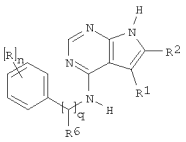
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9702266	A1	19970123	WO 1996-EP2728	19960624
W: AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2224435	A1	19970123	CA 1996-2224435	19960624
CA 2224435	C	20080805		
AU 9664148	A	19970205	AU 1996-64148	19960624
AU 707626	B2	19990715		
EP 836605	A1	19980422	EP 1996-923893	19960624
EP 836605	B1	20020206		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9609617	A	19990525	BR 1996-9617	19960624
HU 9900330	A2	19990528	HU 1999-330	19960624
HU 9900330	A3	20010828		
JP 11508570	T	19990727	JP 1997-504763	19960624
JP 4146514	B2	20080910		
AT 212993	T	20020215	AT 1996-923893	19960624
PT 836605	E	20020731	PT 1996-923893	19960624
ES 2172670	T3	20021001	ES 1996-923893	19960624
IL 122855	A	20040831	IL 1996-122855	19960624
PL 188959	B1	20050531	PL 1996-324285	19960624
ZA 9605723	A	19970106	ZA 1996-5723	19960705
TW 472057	B	20020111	TW 1996-85108440	19960712
NO 9705956	A	19980210	NO 1997-5956	19971218
NO 310359	B1	20010625		
US 6140332	A	20001031	US 1998-981877	19980126
HK 1008222	A1	20021018	HK 1998-109298	19980720

PRIORITY APPLN. INFO.: CH 1995-1976 A 19950706
CH 1995-2498 A 19950901

L4 ANSWER 48 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

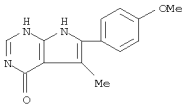
CH 1995-3198	A	19951110	
CH 1996-255	A	19960201	
CH 1996-1224	A	19960513	
WO 1996-EP2728	W	19960624	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 126:199578
GI



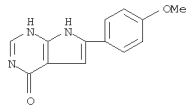
I

AB The title compds. [I; R = halo, lower alkyl, OH, etc.; R1, R2 = H, (un)substituted Ph, pyridyl, etc.; R1R2 = (un)substituted C4-10 1,4-alkadienylene; R6 = H, lower alkyl, lower alkoxycarbonyl, etc.; q = 0-1; n = 1-3 when q = 0; n = 0-3 when q = 1], which inhibit tyrosine protein kinase and can be used in the treatment of hyperproliferative diseases, for example tumor diseases, were prepared and formulated. Thus,
reaction of 4-chloro-6-(pyrid-2-yl)-7H-pyrrolo[2,3-d]pyrimidine with 3-chloroaniline in the presence of DMPU in n-BuOH afforded I [R = 3-Cl; R1
= H; R2 = 2-pyridyl; q = 0]. Compds. I are effective at 0.5-2 g/day in the treatment of an individual having a body weight of about 70 kg.
IT 173459-00-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of 7H-pyrrolo[2,3-d]pyrimidines as tyrosine protein kinase
inhibitors)
RN 173459-00-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)-5-methyl- (CA INDEX NAME)

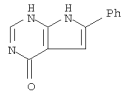


L4 ANSWER 48 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

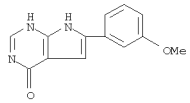
IT 173458-97-4P 173458-99-6P 173459-01-3P
173459-02-4P 187724-80-7P 187724-89-6P
187724-92-1P 187724-95-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 7H-pyrrolo[2,3-d]pyrimidines as tyrosine protein kinase
inhibitors)
RN 173458-97-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)- (CA INDEX NAME)



RN 173458-99-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl- (CA INDEX NAME)

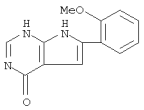


RN 173459-01-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(3-methoxyphenyl)- (CA INDEX NAME)

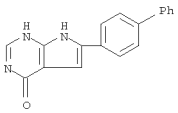


RN 173459-02-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(2-methoxyphenyl)- (CA INDEX NAME)

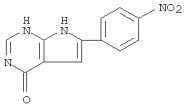
L4 ANSWER 48 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 187724-80-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 6-[1,1'-biphenyl]-4-yl-3,7-dihydro- (CA INDEX NAME)

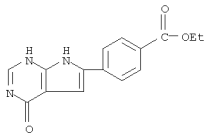


RN 187724-89-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-nitrophenyl)- (CA INDEX NAME)

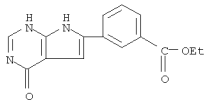


RN 187724-92-1 CAPLUS
CN Benzoic acid, 4-(4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-6-yl)-, ethyl ester (CA INDEX NAME)

L4 ANSWER 48 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 187724-95-4 CAPLUS
CN Benzoic acid, 3-(4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-6-yl)-, ethyl ester (CA INDEX NAME)

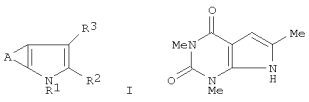


OS.CITING REF COUNT: 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS RECORD (30 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 49 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:748348 CAPLUS
DOCUMENT NUMBER: 126:31363
ORIGINAL REFERENCE NO.: 126:6381a,6384a
TITLE: Preparation of pyrrolodiazines as stabilizers for chlorine-containing polymer
INVENTOR(S): Wehner, Wolfgang; Friedrich, Hans-Helmut; Drewes, Rolf
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Can. Pat. Appl., 88 pp.
CODEN: CPXXEB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

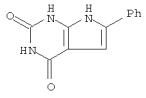
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2172692	A1	19960929	CA 1996-2172692	19960326
TW 426681	B	20010321	TW 1996-85103154	19960316
US 5770643	A	19980623	US 1996-618591	19960320
AU 9648232	A	19961010	AU 1996-48232	19960321
AU 702566	B2	19990225		
JP 08269279	A	19961015	JP 1996-95952	19960326
IL 117652	A	20000601	IL 1996-117652	19960326
NO 9601236	A	19960930	NO 1996-1236	19960327
ZA 9602437	A	19961001	ZA 1996-2437	19960327
BR 9601178	A	19980331	BR 1996-1178	19960328
US 6002004	A	19991214	US 1998-7196	19980114
PRIORITY APPLN. INFO.:			EP 1995-810204 A	19950328
			US 1996-618591 A3	19960320

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 126:31363
GI

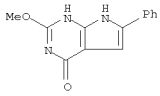


AB Title compds. [I; A = C(:X)NR4C(:X)NR5 or C(:X)NR4C(YR5):N; R1 = H, alkyl, phenyl(alkyl), etc.; R2,R3 = H, alkyl, phenyl(alkyl), etc.; X = O, S, (alkyl)imino, etc.] were prepared Thus, 4-amino-1,3-dimethyluracil was cyclocondensed with ClCH2COMe to give title compound II. Data for performance of I were given.
IT 183373-21-9P 183373-26-4P
RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation of pyrrolodiazines as stabilizers for chlorine-containing polymer)

L4 ANSWER 49 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 183373-21-9 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-phenyl- (CA INDEX NAME)



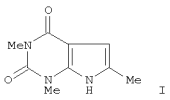
RN 183373-26-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-methoxy-6-phenyl- (CA INDEX NAME)



L4 ANSWER 50 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:721646 CAPLUS
DOCUMENT NUMBER: 125:330527
ORIGINAL REFERENCE NO.: 125:61907a,61910a
TITLE: Derivatives of pyrrolodiazine as stabilizers for polymers containing chlorine
INVENTOR(S): Wehner, Wolfgang; Friedrich, Hans-Helmut; Drewes, Rolf
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 65 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 736569	A1	19961009	EP 1996-810172	19960319
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
TW 426681	B	20010321	TW 1996-85103154	19960316
US 5770643	A	19980623	US 1996-618591	19960320
AU 9648232	A	19961010	AU 1996-48232	19960321
AU 702566	B2	19990225		
JP 08269279	A	19961015	JP 1996-95952	19960326
IL 117652	A	20000601	IL 1996-117652	19960326
NO 9601236	A	19960930	NO 1996-1236	19960327
ZA 9602437	A	19961001	ZA 1996-2437	19960327
BR 9601178	A	19980331	BR 1996-1178	19960328
US 6002004	A	19991214	US 1998-7196	19980114
PRIORITY APPLN. INFO.:			EP 1995-810204 A	19950328
			US 1996-618591 A3	19960320

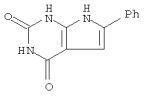
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 125:330527
GI



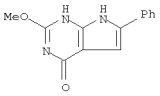
I

AB Pyrrolodiazines of specified structure are good stabilizers for polymers containing Cl, especially PVC. Refluxing 1,3-dimethyluracil 1.0, chloroacetone 1.1, and NH4OAc 2.0 mol in H2O for 14 h gave 55% pyrrolodiazinedione I. Heating compounded PVC containing 1.0 phr I at 190° for 30 min gave PVC with yellowness index 42.0; vs. 143.4 after 25 min in the absence of I.

L4 ANSWER 50 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
IT 183373-21-9P 183373-26-4P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(preparation as heat stabilizer for chlorinated polymers)
RN 183373-21-9 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-phenyl- (CA INDEX NAME)



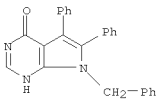
RN 183373-26-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-methoxy-6-phenyl- (CA INDEX NAME)



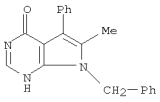
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L4 ANSWER 51 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:338201 CAPLUS
DOCUMENT NUMBER: 124:331709
ORIGINAL REFERENCE NO.: 124:61201a,61204a
TITLE: 4-(Phenylamino)pyrrolopyrimidines: Potent and Selective, ATP Site Directed Inhibitors of the EGF-Receptor Protein Tyrosine Kinase
AUTHOR(S): Traxler, Peter M.; Furet, Pascal; Mett, Helmut; Buchdunger, Elisabeth; Meyer, Thomas; Lydon, Nicholas
CORPORATE SOURCE: Cancer and Bone Metabolism Research Department, CIBA Limited, Basel, CH-4002, Switz.
SOURCE: Journal of Medicinal Chemistry (1996), 39(12), 2285-2292
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Using a pharmacophore model for ATP-competitive inhibitors interacting with the active site of the EGF-R protein tyrosine kinase (PTK), 4-(phenylamino)-7H-pyrrolo[2,3-d]pyrimidines have been identified as a novel class of potent EGF-R protein tyrosine kinase inhibitors. In an interactive process, this class of compds. was then optimized. The most potent compds. of this series inhibited the EGF-R PTK with IC50 values in the low nanomolar range. High selectivity toward a panel of nonreceptor tyrosine kinases (c-Src, v-Abl) and serine/threonine kinases (PKC α, PKA) was observed Kinetic anal. revealed competitive type kinetics relative to ATP. In cells, EGF-stimulated cellular tyrosine phosphorylation was inhibited by 4 compds. at IC50 values between 0.1 and 0.4 μM, whereas PDGF-induced tyrosine phosphorylation was not affected by concns. up to 10 μM. In addition, these compds. were able to selectively inhibit c-fos mRNA expression in EGF-dependent cell lines with IC50 values between 0.1 and 2 μM, but did not affect c-fos mRNA induction in response to PDGF or PMA (IC50 >100 μM). Proliferation of the EGF-dependent MK cell line was inhibited with similar IC50 values. From SAR studies, a binding mode for 4-(phenylamino)-7H-pyrrolo[2,3-d]pyrimidines as well as for the structurally related 4-(phenylamino)quinazolines at the ATP-binding site of the EGF-R tyrosine kinase is proposed. 4-(Phenylamino)-7H-pyrrolo[2,3-d]pyrimidines therefore represent a new class of highly potent tyrosine kinase inhibitors which preferentially inhibit the EGF-mediated signal transduction pathway and have the potential for further evaluation as anticancer agents.
IT 173458-79-2P 176915-50-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(phenylaminopyrrolopyrimidines: potent and selective, ATP site directed inhibitors of EGF-receptor protein tyrosine kinase)
RN 173458-79-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl-7-(phenylmethyl)- (CA INDEX NAME)

L4 ANSWER 51 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

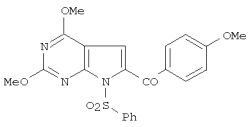


RN 176915-50-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-methyl-5-phenyl-7-(phenylmethyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 101 THERE ARE 101 CAPLUS RECORDS THAT CITE THIS RECORD (102 CITINGS)

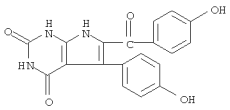
L4 ANSWER 52 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:147589 CAPLUS
DOCUMENT NUMBER: 124:289977
ORIGINAL REFERENCE NO.: 124:53791a,53794a
TITLE: Condensed heteroaromatic ring systems. Part 24. Synthesis of rigidin, a pyrrolo[2,3-d]pyrimidine marine alkaloid
AUTHOR(S): Sakamoto, Takao; Kondo, Yoshinori; Sato, Shuichiroh; Yamanaka, Hiroshi
CORPORATE SOURCE: Fac. Pharmaceutical Sci., Tohoku Univ., Sendai, 980-77, Japan
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1996), (5), 459-64
CODEN: JCPRB4; ISSN: 0300-922X
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 124:289977
GI



II

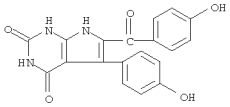
AB The marine alkaloid rigidin was synthesized from 2,4-dimethoxy-7-phenylsulfonylpyrrolo[2,3-d]pyrimidine (I). Lithiation of I followed by electrophilic substitution with N,4-dimethoxy-N-methylbenzamide afforded 6-(4-methoxy)benzoyl derivative II, which by alkaline hydrolysis and subsequent iodination was converted into 2,4-dimethoxy-5-iodopyrrolo[2,3-d]pyrimidin-6-yl 4-methoxyphenyl ketone. The palladium-catalyzed arylation of this ketone with 2-(4-methoxyphenyl)-1,3,2-dioxaborinane followed by demethylation with boron tribromide gave rigidin.
IT 132160-44-2P, Rigidin
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of rigidin, a pyrrolo[2,3-d]pyrimidine marine alkaloid)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)

L4 ANSWER 52 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

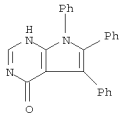


OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

L4 ANSWER 53 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:102691 CAPLUS
DOCUMENT NUMBER: 124:261553
ORIGINAL REFERENCE NO.: 124:48475a,48478a
TITLE: New synthetic routes to 5-substituted pyrrolo(2,3-d)pyrimidines. total synthesis of rigidin and 2'-deoxy-cadeguomycin. synthesis and characterization of novel mesoionic imidazo(1,2-c)pyrimidine-3-ones
AUTHOR(S): Wei, Yuan
CORPORATE SOURCE: Utah State Univ., Logan, UT, USA
SOURCE: (1995) 138 pp. Avail.: Univ. Microfilms Int., Order No. DA9603501
From: Diss. Abstr. Int., B 1995, 56(9), 4894
DOCUMENT TYPE: Dissertation
LANGUAGE: English
AB Unavailable
IT 132160-44-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(total synthesis of rigidin and deoxycadeguomycin and preparation and characterization of mesoionic imidazopyrimidinones)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)



L4 ANSWER 54 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:97030 CAPLUS
DOCUMENT NUMBER: 124:260966
ORIGINAL REFERENCE NO.: 124:48347a,48350a
TITLE: Synthesis of fused pyrimidinones by reaction of aminoarenecarboxamide with esters; preparation of pyrrolo[2,3-d]-, thieno[2,3-d]-, isoxazolo[5,4-d]-, and 1,2,3-triazolo[4,5-d]pyrimidinones, and -quinazolones
AUTHOR(S): Miyashita, Akira; Fujimoto, Katsuhiro; Okada, Tomomi; Higashino, Takeo
CORPORATE SOURCE: Sch. Pharm. Sci., Univ. Shizuoka, Shizuoka, 422, Japan
SOURCE: Heterocycles (1996), 42(2), 691-9
CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER: Japan Institute of Heterocyclic Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 124:260966
AB Several fused pyrimidinones were synthesized by reaction of aminoarenecarboxamide with esters in moderate to good yields. In the presence of sodium ethoxide, treatments of 2-amino-1-phenyl-3-pyrrolecarboxamide, 2-amino-3-thiophenecarboxamide, 3-amino-4-isoxazolecarboxamide, 4-amino-1,2,3-triazole-5-carboxamide, and o-aminobenzamide with esters such as Et formate and Et acetate led to the corresponding pyrrolo[2,3-d]- and thieno[2,3-d]pyrimidin-4(3H)-ones, isoxazolo[5,4-d]pyrimidin-4(5H)-ones, 1,2,3-triazolo[4,5-d]pyrimidin-7(6H)-ones, and -4(3H)-quinazolones, resp.
IT 175348-05-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 175348-05-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6,7-triphenyl- (CA INDEX NAME)



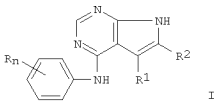
OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

L4 ANSWER 55 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:998042 CAPLUS
DOCUMENT NUMBER: 124:176133
ORIGINAL REFERENCE NO.: 124:32667a,32670a
TITLE: Preparation of 4-anilino-7H-pyrrolo[2,3-d]pyrimidines with antiproliferative activity.
INVENTOR(S): Traxler, Peter; Furet, Pascal; Brill, Wolfgang K. D.
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 682027	A1	19951115	EP 1995-810271	19950425
EP 682027	B1	19971015		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
TW 379223	B	20000111	TW 1995-84104001	19950424
AT 159257	T	19971115	AT 1995-810271	19950425
ES 2109796	T3	19980116	ES 1995-810271	19950425
AU 9517722	A	19951109	AU 1995-17722	19950427
AU 695244	B2	19980813		
FI 9502033	A	19951104	FI 1995-2033	19950428
HU 71818	A2	19960228	HU 1995-1230	19950428
CA 2148324	A1	19951104	CA 1995-2148324	19950501
JP 08053454	A	19960227	JP 1995-107305	19950501
JP 3042760	B2	20000522		
ZA 9503495	A	19951103	ZA 1995-3495	19950502
NO 9501684	A	19951106	NO 1995-1684	19950502
CN 1128263	A	19960807	CN 1995-105418	19950502
US 5686457	A	19971111	US 1995-434419	19950503
US 6096749	A	20000801	US 1998-53266	19980401

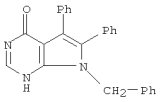
PRIORITY APPLN. INFO.:
CH 1994-1385 A 19940503
CH 1995-245 A 19950130
US 1995-434419 A1 19950503
US 1997-889388 B1 19970708

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 124:176133
GI

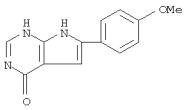


I

AB Title compds. [I; n = 0-5; R = halo, alkyl, CF3, alkoxy; R1, R2 = alkyl, (substituted) Ph; 1 of R1, R2 can = H; R1R2 = (alkyl-substituted) C2-5 alkylene], were prepared Thus, 4-(m-chloroanilino)-5,6-dimethyl-7-benzylpyrrolo[2,3-d]pyrimidine (preparation from 2-amino-4,5-dimethyl-1-benzyl-3-cyanopyrrole given) was refluxed 2 h with AlCl3 in PhMe to give 4-(m-chloroanilino)-5,6-dimethyl-7H-pyrrolo[2,3-d]pyrimidine. The latter at 1.56 mg/kg/day orally in mice transplanted with A431 tumors gave a T/C of 45-61%.
IT 173458-79-2P 173458-97-4P 173458-98-5P
173458-99-6P 173459-00-2P 173459-01-3P
173459-02-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 4-anilino-7H-pyrrolo[2,3-d]pyrimidines with antiproliferative activity)
RN 173458-79-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl-7-(phenylmethyl)- (CA INDEX NAME)

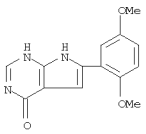


RN 173458-97-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)- (CA INDEX NAME)

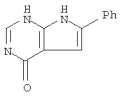


L4 ANSWER 55 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

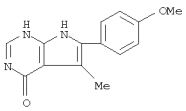
RN 173458-98-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 6-(2,5-dimethoxyphenyl)-3,7-dihydro- (CA INDEX NAME)



RN 173458-99-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-phenyl- (CA INDEX NAME)

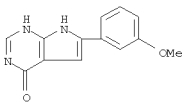


RN 173459-00-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(4-methoxyphenyl)-5-methyl- (CA INDEX NAME)

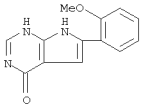


RN 173459-01-3 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(3-methoxyphenyl)- (CA INDEX NAME)

L4 ANSWER 55 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 173459-02-4 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-6-(2-methoxyphenyl)- (CA INDEX NAME)

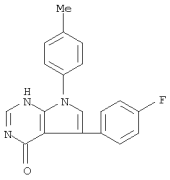


OS.CITING REF COUNT: 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS RECORD (31 CITINGS)

L4 ANSWER 56 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:718510 CAPLUS
DOCUMENT NUMBER: 123:339786
ORIGINAL REFERENCE NO.: 123:60987a,60990a
TITLE: Pyrrolo[2,3-d]pyrimidines. Part 1. Synthesis of novel pyrrolo[2,3-d]pyrimidine derivatives with antimicrobial activity
AUTHOR(S): El-Bayouki, Khairy A. M.; Basyouni, Wahid M.; Hosni, Hanaa; El-Deen, A. Shehab
CORPORATE SOURCE: National Research Center, Cairo, Egypt
SOURCE: Journal of Chemical Research, Synopses (1995), (8), 314-15
CODEN: JRPSDC; ISSN: 0308-2342
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 123:339786

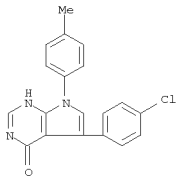
AB 2-Aminopyrrole-3-carbonitriles have been prepared as precursors for synthesizing triazolo-, tetrazolo-, and 4-(3,5-dimethylpyrazolo)pyrrolopyrimidines, as well as a 3-(pyrrolopyrimidinylhydrazono)butanoate ester; antimicrobial screening of some selected examples from the synthesized products was carried out.

IT 170464-80-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of pyrrolo[2,3-d]pyrimidine derivs. with antimicrobial activity)
RN 170464-80-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-fluorophenyl)-3,7-dihydro-7-(4-methylphenyl)- (CA INDEX NAME)



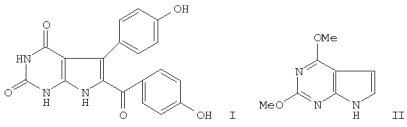
IT 170464-79-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of pyrrolo[2,3-d]pyrimidine derivs. with antimicrobial activity)
RN 170464-79-6 CAPLUS

L4 ANSWER 56 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 5-(4-chlorophenyl)-3,7-dihydro-7-(4-methylphenyl)- (CA INDEX NAME)



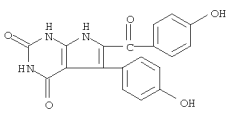
OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD
(8 CITINGS)

L4 ANSWER 57 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:435957 CAPLUS
DOCUMENT NUMBER: 121:35957
ORIGINAL REFERENCE NO.: 121:6663a,6666a
TITLE: Total synthesis of a marine alkaloid, rigidin
AUTHOR(S): Sakamoto, Takao; Kondo, Yoshinori; Sato, Shuichiroh; Yamanaka, Hiroshi
CORPORATE SOURCE: Pharm. Inst., Tohoku Univ., Sendai, 980, Japan
SOURCE: Tetrahedron Letters (1994), 35(18), 2919-20
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 121:35957
GI



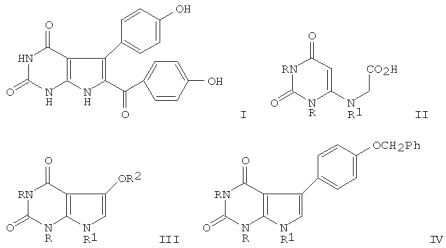
AB Rigidin (I), a marine alkaloid, was synthesized by the combination of acylation via lithiation and arylation by palladium-catalyzed reaction starting from 2,4-dimethoxypyrrolo[2,3-d]pyrimidine.

IT 132160-44-2P, Rigidin
RL: SPN (Synthetic preparation); PREP (Preparation)
(total synthesis of)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD
(5 CITINGS)

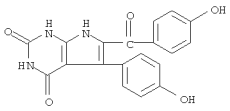
L4 ANSWER 58 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:124857 CAPLUS
DOCUMENT NUMBER: 118:124857
ORIGINAL REFERENCE NO.: 118:21665a,21668a
TITLE: Synthesis of a novel pyrrolo[2,3-d]pyrimidine alkaloid, rigidin
AUTHOR(S): Edstrom, Eric D.; Wei, Yuan
CORPORATE SOURCE: Dep. Chem. Biochem., Utah State Univ., Logan, UT, 84322-0300, USA
SOURCE: Journal of Organic Chemistry (1993), 58(2), 403-7
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 118:124857
GI



AB An efficient nine-step synthesis of the brain phosphodiesterase inhibitor, rigidin, (I) was accomplished in 26% overall yield starting from 6-chlorouracil and Et (2,4-dimethoxybenzyl)glycinate. A key feature of the synthetic route reveals a new method for the annulation of pyrrole rings onto pyrimidine rings starting from 6-chlorouracils and N-benzylglycine sodium salts. Thus, initial condensation adducts II [R = R1 = PhCH2; R = PhCH2OCH2, R1 = 2,4-(MeO)2C6H3CH2] were converted into 5-acetoxypyrroles III (R2 = Ac) upon warming in acetic anhydride. The readily derived 5-trifluoromethanesulfonoxy materials III [R = R1 = PhCH2; R = PhCH2OCH2, R1 = 2,4-(MeO)2C6H3; R2 = F3CSO2] undergo palladium-catalyzed cross couplings with aryltin reagent 4-PhCH2OC6H4SnBu3 and afford C-5 aryl compds. IV. Acylation at the C-6 position in IV was best effected using a mixed anhydride reagent derived from 4-PhCH2OC6H4CO2H and trifluoroacetic anhydride. The optimal route to ridigin involved a one-pot deprotection procedure of using excess trimethylsilyl iodide followed by heating in water.

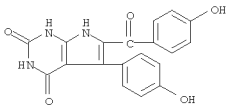
IT 132160-44-2P, Rigidin
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of)

L4 ANSWER 58 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,
6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)



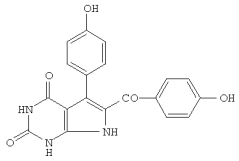
OS.CITING REF COUNT: 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)

L4 ANSWER 59 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)

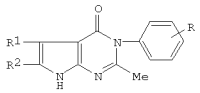
L4 ANSWER 59 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1991:98591 CAPLUS
DOCUMENT NUMBER: 114:98591
ORIGINAL REFERENCE NO.: 114:16747a,16750a
TITLE: Rigidin, a novel alkaloid with calmodulin antagonistic
activity from the okinawan marine tunicate Eudistoma cf. rigida
AUTHOR(S): Kobayashi, Junichi; Cheng, Jie Fei; Kikuchi, Yumiko; Ishibashi, Masami; Yamamura, Shosuke; Ohizumi, Yasushi; Ohta, Tomihisa; Nozoe, Shigeo
CORPORATE SOURCE: Fac. Pharm. Sci., Hokkaido Univ., Sapporo, 060, Japan
SOURCE: Tetrahedron Letters (1990), 31(32), 4617-20
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

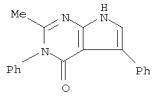
AB A novel pyrrolopyrimidine alkaloid, rigidin (I) with calmodulin antagonisitc activity was isolated from the Okinawan marine tunicate E. rigida. The structure was elucidated on the basis of spectral data of I and its pentamethyl derivative
IT 132160-44-2, Rigidine
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of tunicate, isolation and mol. structure and calmodulin antagonistic activity of)
RN 132160-44-2 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione,
6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)

L4 ANSWER 60 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1990:515226 CAPLUS
DOCUMENT NUMBER: 113:115226
ORIGINAL REFERENCE NO.: 113:19527a,19530a
TITLE: Phosphorus pentoxide in organic synthesis. XXXX. Synthesis of 3-aryl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-ones
AUTHOR(S): Hilmy, Khalid Mohamed Hassan; Mogensen, Jorgen; Jorgensen, Anker; Pedersen, Erik B.
CORPORATE SOURCE: Dep. Chem., Odense Univ., Odense, DK-5230, Den.
SOURCE: Heterocycles (1990), 31(2), 367-72
CODEN: HTCYAM; ISSN: 0385-5414
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 113:115226
GI

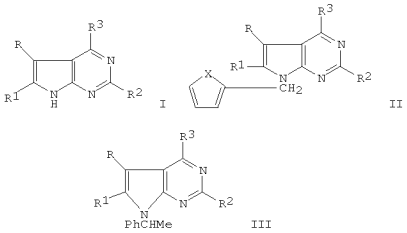


I

AB Title compds. I (R = H, 4-Me, 3-F, 4-Cl, 3-Cl, 3-CF3, etc.; R1 = Me, Ph; R2 = H, PhCH2) were prepared in 18-51% yields by heating 2-(acetylamino)-3-pyrrolecarbonitriles with a mixture of P2O5, N,N-dimethylcyclohexylamine hydrochloride, water, and an appropriate arylamine hydrochloride at 180°.
IT 129158-03-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 129158-03-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-methyl-3,5-diphenyl- (CA INDEX NAME)

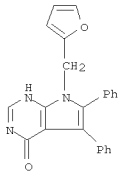


L4 ANSWER 61 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1986:572397 CAPLUS
DOCUMENT NUMBER: 105:172397
ORIGINAL REFERENCE NO.: 105:27789a,27792a
TITLE: Synthesis of 7-unsubstituted 7H-pyrrolo[2,3-d]pyrimidines
AUTHOR(S): Pichler, Herbert; Folkers, Gerd; Roth, Hermann J.; Eger, Kurt
CORPORATE SOURCE: Pharm. Inst., Univ. Bonn, Bonn, D-5300, Fed. Rep. Ger.
SOURCE: Liebigs Annalen der Chemie (1986), (9), 1485-505
CODEN: LACHDL; ISSN: 0170-2041
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 105:172397
GI

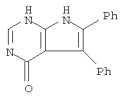


AB Pyrrolopyridines I [R,R1 = Me, Ph; R2 = H, NH2; R3 = OH, NH2, Cl, NHAc, NAc2, NHCOEt, N(COEt)2] were obtained by N-7 dealkylation of the 2-furanylmethyl, 2-thienylmethyl, or 1-phenylethyl group from furans II (X = O, S) and styrenes III with polyphosphoric acid. In contrast to the 2-furanylmethyl group the 2-thienylmethyl and 1-phenylethyl groups were removed independently of the substitution of II and III.
IT 103026-17-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and furylmethyl cleavage of, with polyphosphoric acid)
RN 103026-17-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 7-(2-furanylmethyl)-3,7-dihydro-5,6-diphenyl- (CA INDEX NAME)

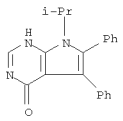
L4 ANSWER 61 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



IT 82703-37-5P 103026-46-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 82703-37-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl- (CA INDEX NAME)

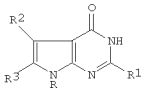


RN 103026-46-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-7-(1-methylethyl)-5,6-diphenyl- (CA INDEX NAME)

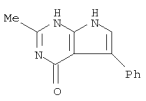


OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

L4 ANSWER 62 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1985:406132 CAPLUS
DOCUMENT NUMBER: 103:6132
ORIGINAL REFERENCE NO.: 103:1103a,1106a
TITLE: Phosphorus pentoxide in organic synthesis; XI. A new synthetic approach to 7-deazahypoxanthines
AUTHOR(S): Girgis, Nabih S.; Joergensen, Anker; Pedersen, Erik B.
CORPORATE SOURCE: Dep. Chem., Odense Univ., Odense, DK-5230, Den.
SOURCE: Synthesis (1985), (1), 101-4
CODEN: SYNTBF; ISSN: 0039-7881
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 103:6132
GI

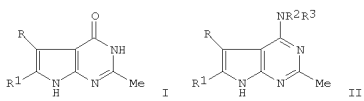


AB Treatment of the acylaminopyrrolecarbonitriles I [R = H, Ph; R1, R2 = Me, Ph; R3 = H, CH2Ph, CH2CHMe2, Me; R2R3 = (CH2)4] with P2O5 and N,N-dimethylcyclohexylamine in H2O gave 57-76% deazahypoxanthines II, whereas treatment with H3PO4 gave the carboxamides which cyclized to II on heating. II (R = Ph, R+ = CF3, R2 = R3 = Me) was obtained directly by both methods.
IT 95927-52-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 95927-52-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-methyl-5-phenyl- (CA INDEX NAME)

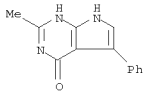


OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L4 ANSWER 63 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1985:166693 CAPLUS
DOCUMENT NUMBER: 102:166693
ORIGINAL REFERENCE NO.: 102:26209a,26212a
TITLE: Phosphorus pentoxide in organic synthesis, XII. Synthesis of 7H-pyrrolo[2,3-d]pyrimidin-4-amines
AUTHOR(S): Joergensen, Anker; Girgis, Nabih S.; Pedersen, Erik B.
CORPORATE SOURCE: Dep. Chem., Odense Univ., Odense, DK-5230, Den.
SOURCE: Liebigs Annalen der Chemie (1985), (1), 142-8
CODEN: LACHDL; ISSN: 0170-2041
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 102:166693
GI



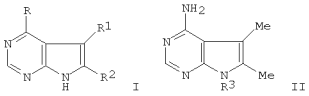
AB Reductive amination of pyrrolopyrimidinones I (R, R1 = Me, H; Ph, H; Me, Me2CHCH2; Me, PhCH2) was carried out with, resp., arylamines R2R3NH (R2 = H, R3 = Ph, 4-FC6H4, 3-MeC6H4, 2,6-Me2C6H3) and alkylamines (R2, R3 = Pr, H; Me, Me; Et, Et) to give, resp., 46-90 and 15-56% amines II.
IT 95927-52-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reductive amination of)
RN 95927-52-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-2-methyl-5-phenyl- (CA INDEX NAME)



L4 ANSWER 64 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:492306 CAPLUS
DOCUMENT NUMBER: 97:92306
ORIGINAL REFERENCE NO.: 97:15395a,15398a
TITLE: Pyrrolopyrimidines and their use in production of biologically effective substances
INVENTOR(S): Jacobi, Haireddin; Roth, Hermann Josef; Eger, Kurt; Pichler, Herbert
PATENT ASSIGNEE(S): Troponwerke G.m.b.H. und Co. K.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 20 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

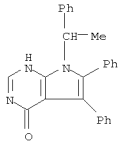
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3036390	A1	19820513	DE 1980-3036390	19800926
PRIORITY APPLN. INFO.:			DE 1980-3036390	19800926

OTHER SOURCE(S): CASREACT 97:92306
GI

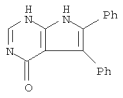


AB Pyrrolopyrimidines I [R = H, NH2, OH, halo, SH, alkylthio, alkoxy, alkyl-, aralkyl-, aryl-, furfurylamino, alkyl (un)substituted with halogen, aryl (un)substituted with halogen, alkyl, CF3, alkoxy; R1, R2 = alkyl, Ph (un)substituted with halogen, CF3, alkyl, alkoxy; R1R2 = alkyl (un)substituted C2-5 alkylene], useful as the title intermediates, were prepared Dealkylating II (R3 = PhCHMe) with polyphosphoric acid at 60° in 3 h and hydrolyzing the product gave 93.6% II (R3 = H).
IT 82703-47-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(dealkylation of)
RN 82703-47-7 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl-7-(1-phenylethyl)- (CA INDEX NAME)

L4 ANSWER 64 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

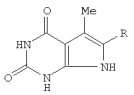


IT 82703-37-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 82703-37-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3,7-dihydro-5,6-diphenyl- (CA INDEX NAME)

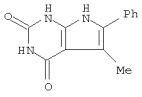


OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

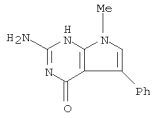
L4 ANSWER 65 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:155147 CAPLUS
DOCUMENT NUMBER: 96:155147
ORIGINAL REFERENCE NO.: 96:25351a,25354a
TITLE: The antitumor and mammalian xanthine oxidase inhibitory activity of 5-methyl-6-substituted pyrrolo(2,3-d)pyrimidine-2,4-diones
AUTHOR(S): Betlach, Charles J.; Sowell, J. Walter, Sr.
CORPORATE SOURCE: Coll. Pharm., Univ. South Carolina, Columbia, SC, 29208, USA
SOURCE: Journal of Pharmaceutical Sciences (1982), 71(2), 269-70
CODEN: JPMSAE; ISSN: 0022-3549
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



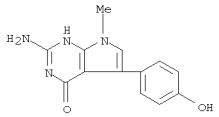
AB Six pyrrolo[2,3-d]pyrimidine-2,4-diones I (R = Me, Et, Ph, etc.) were tested in vitro as inhibitors of xanthine oxidase [9002-17-9] and compared with allopurinol (II). Only 2 of the compds. tested showed inhibition. I (R = Ph) [72211-16-6] had the most activity but it was low compared to II. When the antitumor activity of I (R = Me) [72185-72-9] was tested in vivo against 2 transplantable mouse lymphoid tumor systems the compound appeared to be toxic.
IT 72211-16-6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(xanthine oxidase inhibiting activity of)
RN 72211-16-6 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 5-methyl-6-phenyl- (CA INDEX NAME)



L4 ANSWER 66 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:52262 CAPLUS
DOCUMENT NUMBER: 96:52262
ORIGINAL REFERENCE NO.: 96:8613a,8616a
TITLE: Pyrimido[4,5-c]pyridazines. 4. Cyclizations with α-oxo acids
AUTHOR(S): Styles, Virgil L.; Morrison, Robert W., Jr.
CORPORATE SOURCE: Wellcome Res. Lab., Burroughs Wellcome Co., Research Triangle Park, NC, 27709, USA
SOURCE: Journal of Organic Chemistry (1982), 47(3), 585-7
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 96:52262
AB The simple α-oxo acids (pyruvic and phenylglyoxylic) are as useful as their esters for the preparation of pyrimido[4,5-c]pyridazine-4,5(1H,6H)-diones from 6-(1-alkylhydrazino)isocytosines (I). Phenyl- and (p-hydroxyphenyl)pyruvic acids cyclize with I in refluxing H2O to give 5-aryl-7-alkylpyrrolo[2,3-d]pyrimidines in modest, but synthetically useful, yields. However, alkylation of the hydrazine substituent of I appears to be necessary for either type of cyclization.
IT 80042-18-8P 80042-19-9P 80042-20-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 80042-18-8 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-7-methyl-5-phenyl- (CA INDEX NAME)

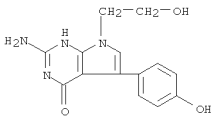


RN 80042-19-9 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-5-(4-hydroxyphenyl)-7-methyl- (CA INDEX NAME)



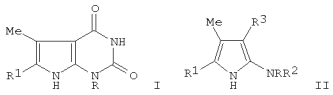
RN 80042-20-2 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-7-(2-hydroxyethyl)-5-

L4 ANSWER 66 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(4-hydroxyphenyl)- (CA INDEX NAME)

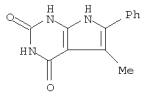


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

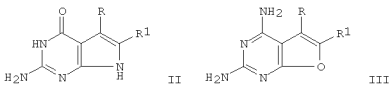
L4 ANSWER 67 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1980:22451 CAPLUS
DOCUMENT NUMBER: 92:22451
ORIGINAL REFERENCE NO.: 92:3821a,3824a
TITLE: Synthesis of substituted pyrrolo[2,3-d]pyrimidine-2,4-diones
AUTHOR(S): Etson, Sandra Rae; Mattson, Ronald J.; Sowell, J. Walter, Sr.
CORPORATE SOURCE: Coll. Pharm., Univ. South Carolina, Columbia, SC, 29208, USA
SOURCE: Journal of Heterocyclic Chemistry (1979), 16(5), 929-33
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 92:22451
GI



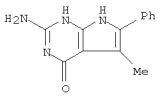
AB Pyrrolopyrimidinediones I (R = H, R1 = Me, Et, CH2CHMe2, Ph, CH2Ph, CH2C6H4OH-4; R = R1 = Me) were obtained by treating II (R2 = H, R3 = CN) with ClCO2Et, hydrolyzing II (R2 = CO2Et, R3 = CN), and cyclizing II (R2 = CO2Et, R3 = CONH2) in octanol or with KOCMe3 in THF.
IT 72211-16-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 72211-16-6 CAPLUS
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 5-methyl-6-phenyl- (CA INDEX NAME)



L4 ANSWER 68 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1978:580272 CAPLUS
DOCUMENT NUMBER: 89:180272
ORIGINAL REFERENCE NO.: 89:28015a,28018a
TITLE: Studies directed toward a total synthesis of nucleoside Q. Annulation of 2,6-diaminopyrimidin-4-one with α-halo carbonyls to form pyrrolo[2,3-d]pyrimidines and furo[2,3-d]pyrimidines
AUTHOR(S): Secrist, John A., III; Liu, Paul S.
CORPORATE SOURCE: Dep. Chem., Ohio State Univ., Columbus, OH, USA
SOURCE: Journal of Organic Chemistry (1978), 43(20), 3937-41
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

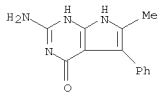


AB The condensation of 2,6-diaminopyrimidin-4-one (I) with RCHXCOR1 [R = H, Me, Ph, PhCH2; R1 = Me, EtO2CCH2, Ph, ClCH2; RR1 = (CH2)4; X = Cl, Br] to give pyrrolo[2,3-d]pyrimidin-4-ones II and furo[2,3-d]pyrimidines III was studied. The reaction was regiospecific. For example, the reaction of I and ClCH2COMe gave II (R = H, R1 = Me) and III (R = Me, R1 = H), whereas I and MeCHClCHO gave II (R = Me, R1 = H) (IV), exclusively. The IV is contained in nucleoside Q.
IT 67194-82-5P 67194-83-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 67194-82-5 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-5-methyl-6-phenyl- (CA INDEX NAME)



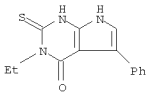
RN 67194-83-6 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-3,7-dihydro-6-methyl-5-phenyl- (CA INDEX NAME)

L4 ANSWER 68 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



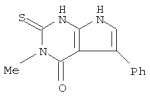
OS.CITING REF COUNT: 31 THERE ARE 31 CAPLUS RECORDS THAT CITE THIS RECORD (31 CITINGS)

L4 ANSWER 69 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1975:43321 CAPLUS
DOCUMENT NUMBER: 82:43321
ORIGINAL REFERENCE NO.: 82:6897a,6900a
TITLE: Pyrrolo[2,3-d]pyrimidines. Synthesis from 4-pyrimidylhydrazones, a 2-bis(methylthio) methyleneaminopyrrole-3-carbonitrile, and a pyrrolo[2,3-d][1,3]thiazine-2(1H)-thione
AUTHOR(S): Duffy, Thomas D.; Wibberley, D. George
CORPORATE SOURCE: Dep. Pharm., Univ. Aston, Birmingham, UK
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1974), (16), 1921-9
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB 2-Amino-4-phenylpyrrole-3-carbonitrile with CS2 gave the pyrrolothiazinethione I, which with amines gave 3-substituted derivs. E.g., I with EtNH2 gave 86% II and 40% III. Hydrazones IV and V in [HO(CH2)2]2O gave indoles VI and VII, resp. Hydrazones VIII-X cyclized similarly on heating.
2-[Bis(methylthio)methyleneamino]-4-phenylpyrrole-3-carbonitrile with amines gave 88-99% of the corresponding 4,7-dihydro-3-alkyl-4-imino-2-methylthio-5-phenyl-3H-pyrrolo[2,3-d]pyrimidines.
IT 54760-28-0P 54760-45-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 54760-28-0 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 3-ethyl-1,2,3,7-tetrahydro-5-phenyl-2-thioxo- (CA INDEX NAME)



RN 54760-45-1 CAPLUS
CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 1,2,3,7-tetrahydro-3-methyl-5-phenyl-2-thioxo- (CA INDEX NAME)

L4 ANSWER 69 OF 69 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
(6 CITINGS)